ISBN 0-7729-1238-6

ACIDIC PRECIPITATION IN ONTARIO STUDY

ANNUAL STATISTICS OF CONCENTRATION AND DEPOSITION -DAILY PRECIPITATION AND AIR MONITORING NETWORK, 1984

ARB-236-85-AQM

APIOS-03-86

January, 1986

Ontario
Ministry of the Environment

The Honourable
Jim Bradley
Minister

Rod McLeod, Q.C.
Deputy Minister

ISBN 0-7729-1238-6

ACIDIC PRECIPITATION IN ONTARIO STUDY

ANNUAL STATISTICS OF CONCENTRATION AND DEPOSITION - DAILY PRECIPITATION AND AIR MONITORING NETWORK, 1984

Atomspheric Processes Studies Unit
Air Quality Meteorology Section
Ontario Ministry of the Environment
Air Resources Branch
880 Bay Street, 4th Floor
Toronto, Ontario
Canada, M5S 1Z8

January 1986

ARB-236-85-AQM
APIOS-03-86

A.P.I.O.S. Coordination Office
Ontario Ministry of the Environment
6th Floor, 40 St. Clair Avenue West
Toronto, Ontario
Canada, M4V 1P5

© **1985 Her Majesty the Queen in Right of Ontario**

TABLE OF CONTENTS

		Page
PART I	INTRODUCTION	III
PART II	STATION DESCRIPTION AND LOCATION MAP	IV
PART III	SUMMARY STATISTICS OF PRECIPITATION CONCENTRATION BY STATION	

Station	Map Ref. No.	
Balsam Lake	06	1
Charleston Lake	11	2
Dorset	08	3
Fernberg	16	4
Forbes Township	13	5
Graham Lake	12	6
Lac La Croix	15	7
Longwoods	02	8
Melbourne	01	9
Nithgrove	07	10
North Easthope	03	11
Otter Island	17	12
Railton	10	13
Raven Lake	05	14
Quetico Centre	14	15
Wellesley	04	16
Whitman Creek	09	17

PART IV	SUMMARY STATISTICS OF PRECIPITATION CONCENTRATION BY REGION	
	Central Region	18
	Northwestern Region	19
	Southeastern Region	20
	Southwestern Region	21
PART V	SUMMARY STATISTICS OF WET DEPOSITION BY STATION	

Station	Map Ref. No.	
Balsam Lake	06	22
Charleston Lake	11	23
Dorset	08	24
Fernberg	16	25
Forbes Township	13	26
Graham Lake	12	27
Lac La Croix	15	28
Longwoods	02	29

Melbourne	01	30
Nithgrove	07	31
North Easthope	03	32
Otter Island	17	33
Railton	10	34
Raven Lake	05	35
Quetico Centre	14	36
Wellesley	04	37
Whitman Creek	09	38

PART VI SUMMARY STATISTICS OF WET DEPOSITION BY REGION

Central Region	39
Northwestern Region	40
Southeastern Region	41
Southwestern Region	42

PART VII SUMMARY STATISTICS OF AIR CONCENTRATION BY STATION, REGION

Station	Map Ref. No.	
Charleston Lake, SE Reg.	11	43
Dorset, Central Region	08	44
Fernberg, NW Region	16	45
Longwoods, SW Region	02	46

PART I

INTRODUCTION

INTRODUCTION

This report was prepared by William Chang, of C.C. & C Computer Systems Inc. The statistical summaries presented in this report pertain to the 1984 analytical results obtained from the Acidic Precipitation in Ontario Study (APIOS) daily precipitation and air monitoring network. The relevant data can be obtained on request from the Air Resources Branch of the Ministry. All available data are utilized in the calculations except results reported as being unreliable (i.e. results are identified as unreasonable values by using the validation procedures; detailed description of the validation procedures is available from the Ministry upon request) or approximate (i.e., inexact results are reported due to laboratory difficulties, such as may be encountered in calibration, or when the sample cannot be re-analyzed to confirm the reported values). In a very few cases, concentration levels exceeded the upper limit of the range of the chemical analysis. Rather than using the upper limit, a decision was made to exclude these values from the statistics generated in this report. If a reported value is labelled as W, it is replaced by a "zero". W is the level which the analytical technique cannot distinguish from zero. If a level is recorded less than the detection limit T, a value corresponding to one half the detection limit is utilized for statistical calculations as reported in the statistical summaries. Note that T is normally about ten times W, and values above the T criterion are considered to be precise and accurate. W corresponds to approximately one standard deviation of low level duplicates of real samples.

The reported precipitation gauge depth (standard rain gauge or nipher shielded snow gauge) is utilized in the calculation of deposition. If a rain gauge value is not available then the collected sample volume is converted to its equivalent precipitation depth and is used in the deposition calculation.

In the air concentration statistical summaries, "Nitric" represents "Nitric Acid" and "Totl NO_3" represents total nitrates calculated by the summation of particulate "Nitrate" and "Nitric Acid".

The statistical summaries presented in Parts III to VII include the number of samples, mean (arithmetic/geometric), standard deviation (arithmetic/geometric), maximum, minimum and quartiles and volume weighted means using precipitation gauge depths where appropriate.

PART II

STATION DESCRIPTION AND LOCATION MAP

STATION SITE LOCATION MAP

APIOS DAILY PRECIPITATION AND AIR MONITORING NETWORK*

1 - MELBOURNE
+ 2 - LONGWOODS
3 - NORTH EASTHOPE
4 - WELLESLEY
5 - RAVEN LAKE
6 - BALSAM LAKE
7 - NITHGROVE
+ 8 - DORSET
9 - WHITMAN CREEK
10 - RAILTON
+ 11 - CHARLESTON LAKE
12 - GRAHAM LAKE
13 - FORBES TOWNSHIP
14 - QUETICO CENTRE
15 - LAC LA CROIX
16 - FERNBERG
+ 17 - OTTER ISLAND

*ALL SITES ARE PRECIPITATION MONITORING SITES. THOSE LABELLED WITH (+) ARE ALSO EQUIPPED WITH AIR MONITORING INSTRUMENTATION

APIOS DAILY PRECIPITATION AND AIR MONITORING NETWORK SITE LOCATIONS *

AREA	MOE REGION	STATION NAME	ELEVATION (m above MSL)	LATITUDE (North)	LONGITUDE (West)	UTM COORDINATES (Northing)	(Easting)
London	Southwestern	Longwoods Conservations Area*	239	42°53'02"	81°28'50"	4747600	460700
		Melbourne	213	42°47'15"	81°33'23"	4737100	454500
		North Easthope	375	43°24'21"	80°53'35"	4805650	508650
		Wellesley	344	43°28'13"	80°45'35"	4812700	519600
Dorset	Central	Dorset Laboratory*	320	45°13'23"	78°55'49"	5009600	662450
		Nithgrove	325	45°12'01"	79°04'14"	5006800	651600
		Balsam Lake Provincial Park	259	44°37'35"	78°51'22"	4943500	670170
		Raven Lake	274	44°36'40"	78°54'43"	4941550	665700
Kingston	Southeastern	Charleston Lake Provincial Park*	92	44°29'54"	76°02'30"	4927500	417150
		Graham Lake	130	44°35'22"	75°51'44"	4937450	431550
		Railton	156	44°22'34"	76°35'33"	4914700	373200
		Whitman Creek	137	44°29'07"	76°49'19"	4927200	355100
Thunder Bay	Northwestern	Fernberg*	506	47°56'51"	91°29'26"	5311000	612000
		Lac La Croix	368	48°21'14"	92°12'32"	5355900	558400
		Forbes Township	324	48°34'58"	83°38'56"	5384150	304800
		Quetico Centre	420	48°24'44"	91°12'08"	5399750	632100
		Otter Island	204	48°06'50"	86°04'25"	5328750	569500

* All sites monitor precipitation concentrations. Sites labelled (*) also monitor air concentrations.

PART III

SUMMARY STATISTICS OF PRECIPITATION CONCENTRATION BY STATION

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

PERIOD OF REPORT : JAN 1,84 TO DEC 29,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES	144	95	75	130	130	129	118
MAXIMUM	49.0	98.0	6.4	7.4	0.3020	0.3520	12.00
MINIMUM	0.1	3.5	3.5	3.5	0.0000	0.0136	0.15
RANGE	48.9	94.5	2.8	3.9	0.3020	0.3384	11.85
ARITH. MEAN	6.1	32.0	4.3	4.6	0.0586	0.0844	2.87
ARITH. STD. DEV	7.5	20.8	0.5	0.8	0.0586	0.0643	2.52
GEOM. MEAN	2.8	26.0	4.3	4.5	0.0254	0.0656	2.05
GEOM. STD. DEV.	4.2	1.9	1.1	1.2	6.8498	2.0638	2.36
1ST QUARTILE	1.1	16.5	4.0	4.1	0.0191	0.0417	1.20
2ND QUARTILE	3.3	26.8	4.2	4.4	0.0407	0.0666	2.15
3RD QUARTILE	8.0	40.3	4.5	4.7	0.0785	0.1051	3.45
VOL. WGT. MEAN	******	27.8	******	******	0.0540	0.0770	2.68

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	118	91	118	91	91	91	105
MAXIMUM	2.600	1.930	1.110	0.370	0.560	0.595	1.450
MINIMUM	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RANGE	2.600	1.930	1.110	0.370	0.560	0.595	1.450
ARITH. MEAN	0.612	0.349	0.240	0.049	0.040	0.091	0.344
ARITH. STD. DEV	0.474	0.445	0.218	0.073	0.075	0.113	0.315
GEOM. MEAN	0.433	0.197	0.164	0.031	0.039	0.069	0.218
GEOM. STD. DEV.	2.681	3.015	2.693	3.233	3.918	3.602	3.393
1ST QUARTILE	0.230	0.100	0.085	0.008	0.002	0.015	0.077
2ND QUARTILE	0.545	0.170	0.170	0.020	0.020	0.055	0.262
3RD QUARTILE	0.845	0.340	0.325	0.050	0.050	0.115	0.460
VOL. WGT. MEAN	0.478	0.251	0.170	0.035	0.031	0.064	0.326

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

PERIOD OF REPORT : JAN 1,84 TO DEC 29,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES :	107	78	24	95	95	95	93
MAXIMUM :	42.4	100.0	5.0	6.5	0.5888	0.6480	22.40
MINIMUM :	0.0	4.6	3.6	3.2	0.0003	0.0172	0.20
RANGE :	42.4	95.4	1.4	3.3	0.5885	0.6308	22.20
ARITH. MEAN :	7.5	33.1	4.4	4.4	0.0741	0.0998	3.17
ARITH. STD. DEV :	8.2	23.4	0.4	0.5	0.0808	0.0857	3.21
GEOM. MEAN :	4.0	25.0	4.4	4.3	0.0437	0.0774	2.05
GEOM. STD. DEV. :	3.6	2.2	1.1	1.1	3.3394	2.0239	2.70
1ST QUARTILE :	1.8	12.1	4.1	4.0	0.0188	0.0428	0.97
2ND QUARTILE :	4.9	28.1	4.4	4.2	0.0569	0.0841	2.10
3RD QUARTILE :	10.2	46.8	4.8	4.7	0.0933	0.1196	4.20
VOL. WGT. MEAN :	******	25.6	******	******	0.0509	0.0738	2.37

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	92	80	92	79	80	80	89
MAXIMUM :	3.670	1.630	1.140	0.360	0.345	0.785	1.500
MINIMUM :	0.040	0.005	0.000	0.000	0.000	0.000	0.001
RANGE :	3.630	1.625	1.140	0.360	0.345	0.785	1.499
ARITH. MEAN :	0.704	0.215	0.205	0.038	0.030	0.075	0.348
ARITH. STD. DEV :	0.619	0.271	0.222	0.053	0.049	0.129	0.311
GEOM. MEAN :	0.470	0.119	0.136	0.030	0.035	0.049	0.216
GEOM. STD. DEV. :	2.694	3.082	2.606	2.983	3.808	4.057	3.218
1ST QUARTILE :	0.270	0.050	0.065	0.010	0.002	0.005	0.118
2ND QUARTILE :	0.580	0.110	0.140	0.020	0.010	0.035	0.285
3RD QUARTILE :	0.960	0.275	0.245	0.050	0.042	0.075	0.465
VOL. WGT. MEAN :	0.449	0.163	0.137	0.028	0.022	0.054	0.275

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #08

PERIOD OF REPORT : DEC 30,83 TO DEC 31,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES	193	102	78	147	147	149	130
MAXIMUM	50.6	95.3	4.9	7.3	0.5248	5.4600	12.80
MINIMUM	0.0	2.5	3.6	3.3	0.0001	0.0182	0.10
RANGE	50.6	92.8	1.3	4.0	0.5248	5.4418	12.70
ARITH. MEAN	5.2	29.0	4.2	4.3	0.0739	0.1631	2.93
ARITH. STD. DEV	7.7	18.6	0.3	0.5	0.0843	0.4969	2.54
GEOM. MEAN	1.9	23.6	4.2	4.3	0.0448	0.0845	2.01
GEOM. STD. DEV.	5.1	2.0	1.1	1.1	3.2865	2.3430	2.60
1ST QUARTILE	0.6	16.3	4.0	4.1	0.0263	0.0495	1.20
2ND QUARTILE	2.1	23.5	4.3	4.3	0.0473	0.0741	2.13
3RD QUARTILE	6.3	39.2	4.4	4.6	0.0881	0.1274	3.72
VOL. WGT. MEAN	######	25.2	######	######	0.0501	0.1911	2.27

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	130	103	130	104	104	104	119
MAXIMUM	2.880	2.600	1.590	0.750	0.830	0.915	2.000
MINIMUM	0.005	0.000	0.000	0.000	0.000	0.000	0.000
RANGE	2.875	2.600	1.590	0.750	0.830	0.915	2.000
ARITH. MEAN	0.596	0.258	0.244	0.052	0.051	0.068	0.350
ARITH. STD. DEV	0.527	0.415	0.268	0.099	0.099	0.118	0.364
GEOM. MEAN	0.395	0.145	0.165	0.046	0.042	0.063	0.228
GEOM. STD. DEV.	2.773	3.271	2.409	3.218	3.784	3.245	3.216
1ST QUARTILE	0.225	0.040	0.090	0.010	0.005	0.015	0.087
2ND QUARTILE	0.420	0.100	0.145	0.015	0.027	0.035	0.240
3RD QUARTILE	0.830	0.265	0.270	0.047	0.050	0.080	0.498
VOL. WGT. MEAN	0.429	0.146	0.152	0.028	0.028	0.047	0.275

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
: INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM #16

PERIOD OF REPORT : JAN 5,84 TO DEC 30,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES :	65	51	0	53	53	55	54
MAXIMUM :	38.3	44.7	******	7.4	0.0676	0.3840	5.30
MINIMUM :	0.1	2.5	******	4.2	0.0000	0.0148	0.20
RANGE :	38.2	42.2	******	3.3	0.0676	0.3692	5.10
ARITH. MEAN :	9.2	13.1	******	5.3	0.0122	0.0378	1.39
ARITH. STD. DEV :	8.5	10.6	******	0.7	0.0155	0.0514	1.17
GEOM. MEAN :	6.0	10.2	******	5.3	0.0046	0.0288	1.02
GEOM. STD. DEV. :	2.8	2.0	******	1.1	5.5528	1.8214	2.24
1ST QUARTILE :	3.4	6.1	******	4.8	0.0019	0.0186	0.47
2ND QUARTILE :	6.3	10.1	******	5.3	0.0053	0.0242	1.07
3RD QUARTILE :	10.9	14.8	******	5.6	0.0166	0.0381	1.75
VOL. WGT. MEAN :	******	11.3	******	******	0.0127	0.0321	1.23

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	54	52	54	52	52	52	53
MAXIMUM :	1.810	7.350	0.410	0.390	0.590	0.480	1.900
MINIMUM :	0.005	0.000	0.010	0.000	0.000	0.000	0.000
RANGE :	1.805	7.350	0.400	0.390	0.590	0.480	1.900
ARITH. MEAN :	0.296	0.418	0.129	0.046	0.045	0.054	0.346
ARITH. STD. DEV :	0.348	1.019	0.087	0.059	0.087	0.072	0.402
GEOM. MEAN :	0.179	0.235	0.105	0.038	0.042	0.039	0.238
GEOM. STD. DEV. :	2.969	2.594	1.960	2.572	3.312	2.821	2.944
1ST QUARTILE :	0.105	0.115	0.080	0.012	0.005	0.020	0.100
2ND QUARTILE :	0.205	0.160	0.100	0.032	0.020	0.035	0.220
3RD QUARTILE :	0.325	0.375	0.140	0.065	0.045	0.062	0.422
VOL. WGT. MEAN :	0.225	0.255	0.096	0.032	0.029	0.034	0.264

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
****** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13

PERIOD OF REPORT : JAN 2,84 TO DEC 28,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB UG/L	TOTAL H+ TO PH8.3 UG/L	SULPHATE MG/L
# OF SAMPLES :	126	75	0	88	88	91	87
MAXIMUM :	52.0	67.7	******	6.8	0.1259	0.1700	7.30
MINIMUM :	0.0	2.0	******	3.9	0.0002	0.0160	0.10
RANGE :	52.0	65.7	******	2.9	0.1257	0.1540	7.20
ARITH. MEAN :	5.5	13.1	******	5.2	0.0148	0.0349	1.29
ARITH. STD. DEV :	7.8	13.4	******	0.6	0.0230	0.0274	1.37
GEOM. MEAN :	2.4	9.3	******	5.1	0.0067	0.0299	0.80
GEOM. STD. DEV. :	4.1	2.2	******	1.1	3.9205	1.6275	2.77
1ST QUARTILE :	0.8	5.1	******	4.8	0.0037	0.0220	0.38
2ND QUARTILE :	2.6	9.3	******	5.1	0.0076	0.0256	0.88
3RD QUARTILE :	6.4	14.8	******	5.4	0.0160	0.0375	1.47
VOL. WGT. MEAN :	******	12.8	******	******	0.0151	0.0360	1.36

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	87	75	86	75	75	75	80
MAXIMUM :	1.440	1.720	8.200	0.290	0.180	5.100	1.300
MINIMUM :	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RANGE :	1.440	1.720	8.200	0.290	0.180	5.100	1.300
ARITH. MEAN :	0.232	0.246	0.191	0.037	0.030	0.106	0.240
ARITH. STD. DEV :	0.267	0.342	0.879	0.053	0.042	0.586	0.300
GEOM. MEAN :	0.180	0.177	0.072	0.037	0.032	0.045	0.165
GEOM. STD. DEV. :	3.030	3.068	3.016	3.146	3.878	4.161	4.377
1ST QUARTILE :	0.060	0.050	0.040	0.005	0.002	0.004	0.012
2ND QUARTILE :	0.150	0.130	0.075	0.015	0.008	0.025	0.118
3RD QUARTILE :	0.325	0.245	0.130	0.045	0.042	0.055	0.363
VOL. WGT. MEAN :	0.208	0.236	0.161	0.028	0.032	0.086	0.247

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
****** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12

PERIOD OF REPORT : JAN 1,84 TO DEC 30,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES :	116	58	23	77	77	77	72
MAXIMUM :	36.0	100.0	5.8	6.7	0.6166	0.7760	69.50
MINIMUM :	0.0	5.0	3.7	3.2	0.0002	0.0150	0.30
RANGE :	36.0	95.0	2.2	3.5	0.6164	0.7610	69.20
ARITH. MEAN :	6.3	33.8	4.5	4.5	0.0769	0.1136	4.97
ARITH. STD. DEV :	7.1	24.2	0.6	0.7	0.0900	0.1085	8.45
GEOM. MEAN :	3.2	25.6	4.5	4.4	0.0347	0.0814	2.91
GEOM. STD. DEV. :	3.6	2.2	1.1	1.2	5.1478	2.2891	2.73
1ST QUARTILE :	1.4	12.9	4.1	4.0	0.0178	0.0404	1.63
2ND QUARTILE :	3.8	30.1	4.3	4.2	0.0596	0.0871	3.15
3RD QUARTILE :	9.0	39.8	5.0	4.7	0.1000	0.1483	5.43
VOL. MGT. MEAN :	******	29.8	******	******	0.0550	0.0863	3.44

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	72	63	73	63	63	63	70
MAXIMUM :	2.900	5.800	13.500	0.450	0.720	12.900	3.000
MINIMUM :	0.030	0.005	0.000	0.000	0.000	0.000	0.000
RANGE :	2.870	5.795	13.500	0.450	0.720	12.900	3.000
ARITH. MEAN :	0.749	0.454	0.425	0.076	0.060	0.283	0.449
ARITH. STD. DEV :	0.645	0.833	1.569	0.098	0.107	1.618	0.447
GEOM. MEAN :	0.494	0.178	0.184	0.043	0.043	0.048	0.296
GEOM. STD. DEV. :	2.759	4.150	3.094	3.660	4.001	4.786	2.897
1ST QUARTILE :	0.290	0.065	0.085	0.010	0.005	0.020	0.116
2ND QUARTILE :	0.505	0.165	0.160	0.030	0.030	0.042	0.368
3RD QUARTILE :	1.100	0.450	0.315	0.097	0.067	0.113	0.570
VOL. MGT. MEAN :	0.565	0.385	0.549	0.054	0.055	0.444	0.346

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/DAILY/AEROCHEM #15

PERIOD OF REPORT : JAN 16,84 TO MAR 15,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES	8	6	0	7	7	7	7
MAXIMUM	18.8	22.7	******	5.2	0.0316	0.0588	2.80
MINIMUM	0.8	8.0	******	4.5	0.0060	0.0238	0.45
RANGE	18.0	14.7	******	0.7	0.0256	0.0350	2.35
ARITH. MEAN	5.3	13.3	******	4.8	0.0194	0.0408	1.18
ARITH. STD. DEV	5.9	5.3	******	0.3	0.0105	0.0124	0.80
GEOM. MEAN	3.4	12.5	******	4.8	0.0163	0.0391	0.99
GEOM. STD. DEV.	2.8	1.5	******	1.1	1.9842	1.3937	1.89
1ST QUARTILE	1.5	8.3	******	4.5	0.0065	0.0249	0.47
2ND QUARTILE	3.6	13.1	******	4.6	0.0177	0.0414	0.95
3RD QUARTILE	6.5	13.6	******	5.0	0.0279	0.0472	1.30
VOL. WGT. MEAN	******	13.1	******	******	0.0201	0.0419	1.10

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	7	5	7	5	5	5	7
MAXIMUM	0.850	0.280	0.120	0.030	0.040	0.085	0.306
MINIMUM	0.190	0.150	0.060	0.010	0.002	0.045	0.001
RANGE	0.660	0.130	0.060	0.020	0.037	0.040	0.305
ARITH. MEAN	0.419	0.184	0.093	0.015	0.019	0.062	0.089
ARITH. STD. DEV	0.227	0.054	0.022	0.009	0.017	0.015	0.107
GEOM. MEAN	0.372	0.179	0.091	0.014	0.011	0.061	0.029
GEOM. STD. DEV.	1.678	1.290	1.281	1.615	3.904	1.263	8.676
1ST QUARTILE	0.210	0.155	0.070	0.010	0.002	0.050	0.002
2ND QUARTILE	0.335	0.160	0.085	0.010	0.011	0.057	0.056
3RD QUARTILE	0.495	0.165	0.110	0.012	0.025	0.062	0.102
VOL. WGT. MEAN	0.358	0.161	0.083	0.014	0.018	0.058	0.113

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
****** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM 802

PERIOD OF REPORT : JAN 5,84 TO DEC 29,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES :	115	76	40	96	96	96	91
MAXIMUM :	51.0	86.3	4.8	7.4	0.3020	0.3720	23.00
MINIMUM :	0.0	6.2	3.4	3.5	0.0000	0.0160	0.15
RANGE :	51.0	80.1	1.4	3.9	0.3020	0.3560	22.85
ARITH. MEAN :	8.3	38.1	4.1	4.4	0.0760	0.1107	4.99
ARITH. STD. DEV :	10.0	19.1	0.3	0.7	0.0604	0.0767	4.24
GEOM. MEAN :	4.3	32.9	4.1	4.3	0.0440	0.0896	3.67
GEOM. STD. DEV. :	3.4	1.8	1.1	1.1	5.0055	1.9458	2.30
1ST QUARTILE :	1.8	22.6	3.9	4.0	0.0339	0.0591	2.25
2ND QUARTILE :	4.4	37.0	4.1	4.2	0.0638	0.0882	3.85
3RD QUARTILE :	9.6	49.7	4.3	4.5	0.0977	0.1346	5.85
VOL. WGT. MEAN :	******	34.7	******	******	0.0651	0.0910	3.60

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	91	76	92	76	76	76	84
MAXIMUM :	2.630	2.160	1.550	0.395	0.400	0.365	6.250
MINIMUM :	0.000	0.020	0.030	0.000	0.000	0.000	0.000
RANGE :	2.630	2.140	1.520	0.395	0.400	0.365	6.250
ARITH. MEAN :	0.808	0.463	0.290	0.084	0.054	0.077	0.617
ARITH. STD. DEV :	0.580	0.498	0.249	0.091	0.070	0.082	0.783
GEOM. MEAN :	0.649	0.281	0.214	0.054	0.040	0.052	0.417
GEOM. STD. DEV. :	2.013	2.843	2.212	2.746	3.339	3.524	2.459
1ST QUARTILE :	0.400	0.115	0.125	0.022	0.015	0.017	0.207
2ND QUARTILE :	0.640	0.310	0.210	0.052	0.035	0.050	0.430
3RD QUARTILE :	1.010	0.580	0.390	0.092	0.057	0.113	0.755
VOL. WGT. MEAN :	0.552	0.282	0.184	0.052	0.037	0.062	0.403

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
****** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01

PERIOD OF REPORT : JAN 4,84 TO DEC 30,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES	107	83	43	104	104	104	98
MAXIMUM	139.5	75.5	6.9	7.8	0.3890	0.4700	8.45
MINIMUM	0.3	9.7	3.6	3.4	0.0000	0.0162	0.35
RANGE	139.2	65.8	3.3	4.4	0.3890	0.4538	8.10
ARITH. MEAN	9.5	34.6	4.3	4.5	0.0649	0.0931	3.55
ARITH. STD. DEV	15.3	15.8	0.6	0.8	0.0563	0.0641	1.94
GEOM. MEAN	5.4	31.0	4.2	4.4	0.0337	0.0769	2.99
GEOM. STD. DEV.	2.8	1.6	1.1	1.2	6.1680	1.8788	1.90
1ST QUARTILE	2.5	22.1	4.0	4.1	0.0282	0.0516	1.95
2ND QUARTILE	4.6	31.1	4.2	4.3	0.0525	0.0792	3.35
3RD QUARTILE	11.3	44.2	4.3	4.6	0.0851	0.1138	4.63
VOL. WGT. MEAN	******	39.2	******	******	0.0738	0.0985	3.92

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	98	81	99	81	81	81	94
MAXIMUM	3.100	2.700	0.970	0.410	0.800	0.830	2.300
MINIMUM	0.040	0.005	0.000	0.000	0.000	0.000	0.016
RANGE	3.060	2.695	0.970	0.410	0.800	0.830	2.284
ARITH. MEAN	0.662	0.463	0.238	0.079	0.055	0.093	0.462
ARITH. STD. DEV	0.427	0.551	0.197	0.096	0.098	0.137	0.368
GEOM. MEAN	0.550	0.264	0.187	0.053	0.042	0.048	0.335
GEOM. STD. DEV.	1.899	3.004	2.060	2.733	3.598	3.983	2.412
1ST QUARTILE	0.370	0.120	0.105	0.020	0.005	0.017	0.195
2ND QUARTILE	0.535	0.240	0.180	0.037	0.030	0.045	0.382
3RD QUARTILE	0.800	0.475	0.275	0.080	0.072	0.085	0.582
VOL. WGT. MEAN	0.586	0.303	0.182	0.052	0.042	0.062	0.443

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
: INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM 807

PERIOD OF REPORT : JAN 1,84 TO DEC 30,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES :	167	99	76	128	128	129	114
MAXIMUM :	51.0	96.5	5.9	7.4	0.4266	10.0000	12.00
MINIMUM :	0.0	3.0	3.6	3.4	0.0000	0.0162	0.20
RANGE :	51.0	93.5	2.3	4.1	0.4265	9.9838	11.80
ARITH. MEAN :	6.2	29.1	4.3	4.6	0.0553	0.1571	2.79
ARITH. STD. DEV :	8.5	21.2	0.4	0.7	0.0598	0.8752	2.29
GEOM. MEAN :	3.1	23.0	4.3	4.5	0.0272	0.0672	2.03
GEOM. STD. DEV. :	3.4	2.0	1.1	1.2	5.1144	2.1963	2.33
1ST QUARTILE :	0.6	14.9	4.0	4.2	0.0186	0.0410	1.22
2ND QUARTILE :	2.8	21.7	4.3	4.4	0.0355	0.0610	2.05
3RD QUARTILE :	8.2	33.8	4.5	4.7	0.0684	0.1025	3.59
VOL. WGT. MEAN :	******	25.3	******	******	0.0466	0.0839	2.30

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	114	100	115	100	100	99	105
MAXIMUM :	2.930	3.000	2.120	0.360	0.830	0.960	3.100
MINIMUM :	0.005	0.000	0.010	0.000	0.000	0.000	0.000
RANGE :	2.925	3.000	2.110	0.360	0.830	0.960	3.100
ARITH. MEAN :	0.598	0.254	0.266	0.045	0.066	0.097	0.371
ARITH. STD. DEV :	0.526	0.366	0.284	0.067	0.096	0.119	0.417
GEOM. MEAN :	0.401	0.159	0.184	0.034	0.046	0.063	0.252
GEOM. STD. DEV. :	2.742	2.670	2.346	2.731	2.727	3.025	2.488
1ST QUARTILE :	0.250	0.080	0.100	0.015	0.020	0.030	0.125
2ND QUARTILE :	0.415	0.145	0.170	0.025	0.040	0.065	0.246
3RD QUARTILE :	0.715	0.250	0.310	0.045	0.080	0.115	0.445
VOL. WGT. MEAN :	0.446	0.161	0.164	0.028	0.043	0.073	0.310

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

PERIOD OF REPORT : JAN 8,84 TO DEC 30,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES :	139	76	38	104	104	106	94
MAXIMUM :	49.0	95.5	6.7	7.4	0.9120	1.0960	20.00
MINIMUM :	0.0	6.6	3.6	3.0	0.0000	0.0144	0.00
RANGE :	49.0	88.9	3.2	4.4	0.9120	1.0816	20.00
ARITH. MEAN :	6.8	32.9	4.5	4.6	0.0667	0.0965	4.09
ARITH. STD. DEV :	8.6	20.3	0.7	0.9	0.1014	0.1172	3.33
GEOM. MEAN :	3.1	27.4	4.4	4.5	0.0238	0.0687	3.10
GEOM. STD. DEV. :	3.8	1.9	1.2	1.2	8.0750	2.2081	2.16
1ST QUARTILE :	1.2	18.0	4.0	4.1	0.0170	0.0382	1.90
2ND QUARTILE :	3.2	28.1	4.3	4.3	0.0457	0.0707	3.27
3RD QUARTILE :	8.6	44.6	4.6	4.8	0.0822	0.1143	4.67
VOL. WGT. MEAN :	******	29.4	******	******	0.0511	0.0781	3.14

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	94	76	94	77	77	77	89
MAXIMUM :	3.280	2.800	1.180	0.875	1.100	0.425	4.250
MINIMUM :	0.000	0.000	0.040	0.000	0.000	0.000	0.042
RANGE :	3.280	2.800	1.140	0.875	1.100	0.425	4.208
ARITH. MEAN :	0.772	0.516	0.281	0.106	0.079	0.109	0.715
ARITH. STD. DEV :	0.631	0.547	0.214	0.135	0.140	0.110	0.724
GEOM. MEAN :	0.593	0.350	0.216	0.072	0.056	0.073	0.482
GEOM. STD. DEV. :	2.133	2.471	2.118	2.836	3.496	3.571	2.500
1ST QUARTILE :	0.350	0.195	0.115	0.030	0.008	0.027	0.280
2ND QUARTILE :	0.580	0.350	0.225	0.060	0.040	0.070	0.515
3RD QUARTILE :	1.070	0.600	0.355	0.132	0.077	0.163	0.840
VOL. WGT. MEAN :	0.519	0.323	0.178	0.064	0.057	0.070	0.499

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
****** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : OTTER ISLAND/DAILY/AEROCHEM #17

PERIOD OF REPORT : JUN 23,84 TO NOV 16,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES :	51	41	0	47	47	47	45
MAXIMUM :	51.0	107.0	******	6.6	0.1445	0.2040	8.60
MINIMUM :	0.1	3.0	******	3.8	0.0002	0.0160	0.20
RANGE :	50.9	104.0	******	2.8	0.1443	0.1880	8.40
ARITH. MEAN :	7.5	24.4	******	4.8	0.0324	0.0571	2.35
ARITH. STD. DEV :	9.7	24.6	******	0.6	0.0373	0.0463	2.15
GEOM. MEAN :	3.4	16.1	******	4.8	0.0157	0.0452	1.55
GEOM. STD. DEV. :	4.1	2.5	******	1.1	4.4419	1.9127	2.60
1ST QUARTILE :	1.2	8.4	******	4.3	0.0095	0.0281	0.80
2ND QUARTILE :	4.1	14.3	******	4.8	0.0160	0.0357	1.55
3RD QUARTILE :	9.8	29.0	******	5.0	0.0405	0.0689	3.05
VOL. WGT. MEAN :	******	17.0	******	******	0.0244	0.0466	1.63

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIN MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	46	36	46	36	36	36	43
MAXIMUM :	3.630	1.300	0.450	0.140	0.220	0.200	2.350
MINIMUM :	0.000	0.000	0.005	0.000	0.000	0.000	0.000
RANGE :	3.630	1.300	0.445	0.140	0.220	0.200	2.350
ARITH. MEAN :	0.484	0.223	0.115	0.027	0.051	0.040	0.447
ARITH. STD. DEV :	0.687	0.356	0.102	0.037	0.061	0.053	0.510
GEOM. MEAN :	0.259	0.107	0.077	0.079	0.107	0.058	0.237
GEOM. STD. DEV. :	3.231	4.159	2.734	3.428	3.267	3.929	4.431
1ST QUARTILE :	0.110	0.040	0.040	0.000	0.000	0.002	0.085
2ND QUARTILE :	0.220	0.080	0.085	0.015	0.030	0.017	0.267
3RD QUARTILE :	0.500	0.235	0.150	0.035	0.082	0.062	0.682
VOL. WGT. MEAN :	0.289	0.135	0.083	0.017	0.028	0.021	0.280

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10

PERIOD OF REPORT : JAN 5,84 TO DEC 29,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES :	60	50	20	55	55	54	54
MAXIMUM :	48.4	81.0	5.5	6.8	0.1622	0.2500	6.45
MINIMUM :	1.2	6.0	3.9	3.8	0.0002	0.0152	0.30
RANGE :	47.2	75.0	1.6	3.0	0.1620	0.2348	6.15
ARITH. MEAN :	13.3	29.8	4.5	4.5	0.0517	0.0805	2.60
ARITH. STD. DEV :	11.6	18.7	0.4	0.6	0.0377	0.0493	1.58
GEOM. MEAN :	8.6	24.5	4.5	4.4	0.0331	0.0676	2.08
GEOM. STD. DEV. :	2.8	1.9	1.1	1.1	3.7084	1.8367	2.06
1ST QUARTILE :	4.4	13.9	4.3	4.1	0.0234	0.0459	1.22
2ND QUARTILE :	8.4	24.8	4.6	4.4	0.0412	0.0641	2.40
3RD QUARTILE :	20.7	39.2	4.7	4.6	0.0759	0.1078	3.50
VOL. WGT. MEAN :	******	25.2	******	******	0.0462	0.0714	2.32

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	54	49	54	49	49	49	54
MAXIMUM :	1.830	2.260	0.630	0.140	0.095	0.420	1.050
MINIMUM :	0.080	0.000	0.000	0.000	0.000	0.000	0.010
RANGE :	1.750	2.260	0.630	0.140	0.095	0.420	1.040
ARITH. MEAN :	0.550	0.302	0.171	0.030	0.020	0.061	0.297
ARITH. STD. DEV :	0.412	0.371	0.136	0.029	0.024	0.085	0.243
GEOM. MEAN :	0.410	0.180	0.134	0.045	0.045	0.056	0.206
GEOM. STD. DEV. :	2.251	3.275	2.336	2.372	3.710	3.842	2.587
1ST QUARTILE :	0.220	0.085	0.075	0.012	0.001	0.005	0.096
2ND QUARTILE :	0.490	0.205	0.125	0.022	0.015	0.035	0.252
3RD QUARTILE :	0.785	0.375	0.245	0.040	0.025	0.072	0.402
VOL. WGT. MEAN :	0.393	0.208	0.136	0.023	0.018	0.047	0.256

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05

PERIOD OF REPORT : JAN 1,84 TO DEC 30,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES :	151	95	73	134	134	134	120
MAXIMUM :	40.0	99.0	5.9	7.3	0.3715	0.4420	20.50
MINIMUM :	0.1	3.5	3.5	3.4	0.0001	0.0148	0.15
RANGE :	39.9	95.5	2.4	3.8	0.3715	0.4272	20.35
ARITH. MEAN :	6.1	28.9	4.2	4.5	0.0624	0.0897	3.11
ARITH. STD. DEV :	7.7	18.1	0.4	0.6	0.0673	0.0741	3.23
GEOM. MEAN :	2.8	23.9	4.2	4.4	0.0339	0.0695	2.11
GEOM. STD. DEV. :	3.8	1.9	1.1	1.1	4.2641	2.0216	2.44
1ST QUARTILE :	1.0	14.9	4.0	4.1	0.0209	0.0436	1.25
2ND QUARTILE :	2.8	24.0	4.2	4.4	0.0417	0.0685	2.07
3RD QUARTILE :	8.0	36.9	4.4	4.7	0.0776	0.1090	3.60
VOL. WGT. MEAN :	******	28.8	******	******	0.0597	0.0826	2.80

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	120	103	121	103	103	103	114
MAXIMUM :	2.270	2.860	1.530	0.675	0.705	0.810	1.850
MINIMUM :	0.000	0.005	0.010	0.000	0.000	0.000	0.000
RANGE :	2.270	2.855	1.520	0.675	0.705	0.810	1.850
ARITH. MEAN :	0.612	0.342	0.253	0.052	0.050	0.091	0.357
ARITH. STD. DEV :	0.483	0.510	0.243	0.093	0.084	0.122	0.355
GEOM. MEAN :	0.438	0.172	0.178	0.034	0.044	0.045	0.210
GEOM. STD. DEV. :	2.537	3.253	2.363	3.250	3.560	3.957	3.684
1ST QUARTILE :	0.260	0.080	0.100	0.010	0.005	0.020	0.123
2ND QUARTILE :	0.460	0.140	0.190	0.015	0.030	0.052	0.285
3RD QUARTILE :	0.920	0.385	0.315	0.055	0.060	0.115	0.425
VOL. WGT. MEAN :	0.497	0.205	0.157	0.029	0.029	0.049	0.311

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

PERIOD OF REPORT : JAN 4,84 TO DEC 29,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES	108	65	0	73	73	77	73
MAXIMUM	37.4	48.2	******	6.6	0.0759	0.1044	4.00
MINIMUM	0.0	1.9	******	4.1	0.0003	0.0154	0.02
RANGE	37.4	46.3	******	2.5	0.0756	0.0890	3.97
ARITH. MEAN	6.5	10.6	******	5.2	0.0119	0.0317	1.12
ARITH. STD. DEV	7.7	8.7	******	0.6	0.0136	0.0162	0.89
GEOM. MEAN	3.2	8.3	******	5.2	0.0065	0.0290	0.80
GEOM. STD. DEV.	3.8	2.0	******	1.1	3.5529	1.4858	2.48
1ST QUARTILE	1.2	5.4	******	4.8	0.0029	0.0216	0.47
2ND QUARTILE	3.2	7.6	******	5.1	0.0084	0.0273	0.85
3RD QUARTILE	9.9	12.1	******	5.5	0.0148	0.0360	1.38
VOL. WGT. MEAN	******	8.8	******	******	0.0102	0.0297	0.92

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	73	66	72	66	65	65	70
MAXIMUM	1.480	1.490	0.370	0.225	0.150	0.230	1.300
MINIMUM	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RANGE	1.480	1.490	0.370	0.225	0.150	0.230	1.300
ARITH. MEAN	0.256	0.237	0.073	0.030	0.030	0.040	0.256
ARITH. STD. DEV	0.291	0.297	0.066	0.040	0.038	0.049	0.304
GEOM. MEAN	0.166	0.147	0.056	0.049	0.037	0.041	0.173
GEOM. STD. DEV.	3.239	3.106	2.632	3.025	3.750	3.564	3.680
1ST QUARTILE	0.080	0.050	0.035	0.005	0.002	0.004	0.040
2ND QUARTILE	0.145	0.125	0.060	0.015	0.017	0.025	0.152
3RD QUARTILE	0.300	0.285	0.095	0.040	0.040	0.052	0.323
VOL. WGT. MEAN	0.179	0.177	0.049	0.022	0.020	0.027	0.199

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
****** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM 804

PERIOD OF REPORT : JAN 1,84 TO DEC 30,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES :	130	84	38	110	110	110	98
MAXIMUM :	35.8	94.0	6.1	7.7	0.4467	0.5376	31.50
MINIMUM :	0.1	4.3	3.3	3.4	0.0000	0.0134	0.15
RANGE :	35.7	89.7	2.8	4.4	0.4467	0.5242	31.35
ARITH. MEAN :	7.2	32.3	4.3	4.5	0.0607	0.0884	3.69
ARITH. STD. DEV :	7.5	19.6	0.5	0.7	0.0597	0.0682	4.10
GEOM. MEAN :	4.3	26.9	4.3	4.4	0.0318	0.0710	2.60
GEOM. STD. DEV. :	2.9	1.9	1.1	1.2	5.5538	1.9514	2.33
1ST QUARTILE :	2.1	17.6	4.1	4.1	0.0240	0.0481	1.50
2ND QUARTILE :	4.1	29.8	4.2	4.3	0.0513	0.0781	2.80
3RD QUARTILE :	9.3	39.5	4.5	4.6	0.0741	0.1056	4.10
VOL. WGT. MEAN :	******	29.0	******	******	0.0547	0.0784	2.98

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	98	81	99	81	81	81	92
MAXIMUM :	3.900	1.750	2.800	0.410	0.100	0.315	2.950
MINIMUM :	0.090	0.000	0.030	0.000	0.000	0.000	0.000
RANGE :	3.810	1.750	2.770	0.410	0.100	0.315	2.950
ARITH. MEAN :	0.639	0.269	0.227	0.051	0.016	0.051	0.488
ARITH. STD. DEV :	0.543	0.289	0.327	0.062	0.020	0.062	0.452
GEOM. MEAN :	0.492	0.172	0.147	0.039	0.058	0.055	0.360
GEOM. STD. DEV. :	2.052	2.803	2.367	2.709	4.144	3.472	2.281
1ST QUARTILE :	0.305	0.070	0.080	0.015	0.000	0.005	0.200
2ND QUARTILE :	0.530	0.180	0.155	0.032	0.005	0.037	0.368
3RD QUARTILE :	0.755	0.350	0.220	0.060	0.025	0.067	0.635
VOL. WGT. MEAN :	0.460	0.184	0.137	0.035	0.011	0.037	0.374

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09

PERIOD OF REPORT : JAN 1,84 TO OCT 29,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES :	53	32	20	38	38	38	35
MAXIMUM :	26.0	91.4	5.0	7.3	282.4871	0.3480	9.60
MINIMUM :	0.9	5.7	3.7	0.5	0.0001	0.0218	0.05
RANGE :	25.1	85.7	1.2	6.7	282.4868	0.3262	9.56
ARITH. MEAN :	9.0	32.2	4.4	4.3	7.4985	0.0957	3.58
ARITH. STD. DEV :	7.2	20.4	0.3	0.9	45.8147	0.0664	2.49
GEOM. MEAN :	6.0	26.2	4.4	4.2	0.0469	0.0785	2.57
GEOM. STD. DEV. :	2.7	2.0	1.1	1.4	8.6433	1.8930	2.75
1ST QUARTILE :	2.9	15.8	4.1	4.1	0.0251	0.0469	1.50
2ND QUARTILE :	7.0	27.5	4.4	4.2	0.0603	0.0956	2.70
3RD QUARTILE :	14.7	45.8	4.6	4.6	0.0815	0.1118	5.05
VOL. WGT. MEAN :	######	27.8	######	######	13.7673	0.0781	2.87

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	34	32	34	32	32	32	34
MAXIMUM :	1.450	1.120	1.130	0.190	0.275	0.775	3.000
MINIMUM :	0.006	0.040	0.030	0.000	0.000	0.000	0.065
RANGE :	1.444	1.080	1.100	0.190	0.275	0.775	2.935
ARITH. MEAN :	0.547	0.302	0.223	0.047	0.051	0.111	0.471
ARITH. STD. DEV :	0.380	0.286	0.250	0.046	0.062	0.180	0.538
GEOM. MEAN :	0.386	0.206	0.153	0.037	0.038	0.070	0.307
GEOM. STD. DEV. :	2.884	2.421	2.286	2.382	3.108	3.893	2.530
1ST QUARTILE :	0.225	0.115	0.080	0.017	0.009	0.020	0.123
2ND QUARTILE :	0.450	0.180	0.145	0.030	0.035	0.040	0.290
3RD QUARTILE :	0.705	0.380	0.260	0.050	0.060	0.113	0.645
VOL. WGT. MEAN :	0.396	0.215	0.153	0.034	0.030	0.063	0.327

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
: INSUFFICIENT DATA OR NOT APPLICABLE

PART IV

SUMMARY STATISTICS OF PRECIPITATION CONCENTRATION BY REGION

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CENTRAL REGION/DAILY PRECIPITATION

PERIOD OF REPORT : DEC 30,83 TO DEC 31,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES :	655	391	302	539	539	541	482
MAXIMUM :	336.0	99.0	6.4	7.4	0.5248	10.0000	20.50
MINIMUM :	0.0	2.5	3.5	3.3	0.0000	0.0136	0.10
RANGE :	336.0	96.5	2.9	4.2	0.5248	9.9864	20.40
ARITH. MEAN :	7.2	29.7	4.3	4.5	0.0630	0.1247	2.93
ARITH. STD. DEV :	18.4	19.7	0.4	0.7	0.0690	0.5029	2.67
GEOM. MEAN :	2.8	24.1	4.2	4.4	0.0324	0.0717	2.05
GEOM. STD. DEV. :	4.0	2.0	1.1	1.1	4.8169	2.1731	2.43
1ST QUARTILE :	1.0	16.1	4.0	4.1	0.0219	0.0436	1.20
2ND QUARTILE :	3.0	24.1	4.2	4.4	0.0417	0.0685	2.10
3RD QUARTILE :	8.0	38.1	4.4	4.7	0.0813	0.1103	3.55
VOL. WGT. MEAN :	######	26.6	######	######	0.0508	0.1008	2.57

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	482	397	484	398	398	397	443
MAXIMUM :	2.930	3.000	2.120	0.750	0.830	0.960	3.100
MINIMUM :	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RANGE :	2.930	3.000	2.120	0.750	0.830	0.960	3.100
ARITH. MEAN :	0.604	0.300	0.251	0.050	0.052	0.087	0.356
ARITH. STD. DEV :	0.502	0.443	0.254	0.084	0.090	0.118	0.364
GEOM. MEAN :	0.416	0.166	0.172	0.036	0.043	0.059	0.226
GEOM. STD. DEV. :	2.678	3.070	2.449	3.085	3.499	3.433	3.197
1ST QUARTILE :	0.240	0.080	0.090	0.010	0.005	0.020	0.113
2ND QUARTILE :	0.440	0.140	0.170	0.020	0.030	0.055	0.255
3RD QUARTILE :	0.850	0.310	0.310	0.050	0.065	0.105	0.462
VOL. WGT. MEAN :	0.466	0.217	0.172	0.038	0.039	0.068	0.334

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
: INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS -- ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTHWESTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : JUL 17,84 TO DEC 31,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES :	358	238	0	268	268	277	266
MAXIMUM :	52.0	107.0	******	7.4	0.1445	0.3840	8.60
MINIMUM :	0.0	1.9	******	3.8	0.0000	0.0148	0.02
RANGE :	52.0	105.1	******	3.6	0.1445	0.3692	8.57
ARITH. MEAN :	6.8	14.4	******	5.1	0.0167	0.0385	1.44
ARITH. STD. DEV :	8.2	15.0	******	0.6	0.0238	0.0356	1.44
GEOM. MEAN :	3.2	10.2	******	5.1	0.0073	0.0318	0.94
GEOM. STD. DEV. :	3.9	2.2	******	1.1	4.3711	1.7149	2.60
1ST QUARTILE :	1.3	5.9	******	4.7	0.0038	0.0220	0.50
2ND QUARTILE :	3.6	9.9	******	5.0	0.0091	0.0275	0.95
3RD QUARTILE :	8.9	15.7	******	5.4	0.0188	0.0399	1.80
VOL. WGT. MEAN :	******	12.0	******	******	0.0148	0.0352	1.25

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES :	267	234	265	234	233	233	253
MAXIMUM :	3.630	7.350	8.200	0.390	0.590	5.100	2.350
MINIMUM :	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RANGE :	3.630	7.350	8.200	0.390	0.590	5.100	2.350
ARITH. MEAN :	0.300	0.277	0.130	0.035	0.037	0.065	0.298
ARITH. STD. DEV :	0.399	0.560	0.505	0.049	0.057	0.336	0.371
GEOM. MEAN :	0.191	0.166	0.074	0.045	0.042	0.044	0.183
GEOM. STD. DEV. :	3.112	3.167	2.677	2.936	3.732	3.544	4.113
1ST QUARTILE :	0.090	0.060	0.050	0.010	0.002	0.005	0.040
2ND QUARTILE :	0.185	0.130	0.080	0.015	0.020	0.027	0.160
3RD QUARTILE :	0.370	0.295	0.130	0.045	0.045	0.060	0.433
VOL. WGT. MEAN :	0.220	0.207	0.100	0.025	0.027	0.046	0.241

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHEASTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : JUL 17,54 TO DEC 31,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES	337	218	87	265	265	264	254
MAXIMUM	48.4	100.0	5.8	7.3	282.4871	0.7760	69.50
MINIMUM	0.0	4.6	3.6	0.5	0.0001	0.0150	0.05
RANGE	48.4	95.4	2.3	6.7	282.4868	0.7610	69.45
ARITH MEAN	8.3	32.4	4.4	4.4	1.1349	0.0993	3.62
ARITH. STD. DEV	8.7	22.1	0.4	0.7	17.3489	0.0853	5.10
GEOM. MEAN	4.5	25.2	4.4	4.4	0.0390	0.0765	2.35
GEOM. STD. DEV.	3.5	2.1	1.1	1.2	4.5760	2.0454	2.60
1ST QUARTILE	2.0	14.2	4.1	4.0	0.0216	0.0453	1.25
2ND QUARTILE	5.1	28.4	4.4	4.3	0.0519	0.0834	2.63
3RD QUARTILE	11.4	45.6	4.8	4.7	0.0902	0.1187	4.42
VOL. WGT. MEAN	******	26.8	******	******	1.9005	0.0767	2.69

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	252	224	253	223	224	224	247
MAXIMUM	3.670	5.800	13.500	0.458	0.720	12.900	3.000
MINIMUM	0.006	0.000	0.000	0.000	0.000	0.000	0.000
RANGE	3.664	5.800	13.500	0.458	0.720	12.900	3.000
ARITH. MEAN	0.663	0.314	0.264	0.048	0.039	0.136	0.382
ARITH. STD. DEV	0.564	0.519	0.862	0.067	0.070	0.865	0.383
GEOM. MEAN	0.451	0.158	0.150	0.038	0.040	0.052	0.245
GEOM. STD. DEV.	2.640	3.359	2.654	2.960	3.713	4.156	2.914
1ST QUARTILE	0.265	0.060	0.080	0.010	0.002	0.007	0.116
2ND QUARTILE	0.505	0.160	0.145	0.025	0.020	0.040	0.294
3RD QUARTILE	0.930	0.365	0.265	0.055	0.050	0.085	0.510
VOL. WGT. MEAN	0.454	0.239	0.241	0.034	0.030	0.150	0.294

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
****** : INSUFFICIENT DATA OR NOT APPLICABLE

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF PRECIPITATION CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHWESTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : JAN 1,84 TO DEC 30,84

	PRECIP. MM	CONDUCT. UMHO/CM	PH FIELD	PH LAB	FREE H+ LAB MG/L	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L
# OF SAMPLES	491	319	159	414	414	416	381
MAXIMUM	139.5	95.5	6.9	7.8	0.9120	1.0960	31.50
MINIMUM	0.0	4.3	3.3	3.8	0.0000	0.0134	0.00
RANGE	139.5	91.2	3.6	4.7	0.9120	1.0826	31.50
ARITH. MEAN	7.8	34.4	4.3	4.5	0.0668	0.0968	4.06
ARITH. STD. DEV	10.5	18.8	0.5	0.8	0.0719	0.0844	3.54
GEOM. MEAN	4.1	29.4	4.3	4.4	0.0323	0.0758	3.05
GEOM. STD. DEV.	3.3	1.8	1.1	1.2	6.2059	2.0087	2.19
1ST QUARTILE	1.8	19.8	4.0	4.1	0.0269	0.0499	1.92
2ND QUARTILE	4.1	31.3	4.2	4.3	0.0525	0.0800	3.22
3RD QUARTILE	10.0	44.5	4.4	4.6	0.0841	0.1167	4.82
VOL. WGT. MEAN	******	33.3	******	******	0.0616	0.0870	3.43

	NITRATE AS N MG/L	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L
# OF SAMPLES	381	314	384	315	315	315	359
MAXIMUM	3.900	2.800	2.800	0.875	1.100	0.830	6.250
MINIMUM	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RANGE	3.900	2.800	2.800	0.875	1.100	0.830	6.250
ARITH. MEAN	0.718	0.426	0.258	0.080	0.051	0.083	0.568
ARITH. STD. DEV	0.551	0.489	0.253	0.101	0.095	0.104	0.607
GEOM. MEAN	0.567	0.257	0.188	0.053	0.048	0.056	0.393
GEOM. STD. DEV.	2.032	2.863	2.217	2.816	3.569	3.650	2.430
1ST QUARTILE	0.350	0.120	0.110	0.020	0.005	0.015	0.212
2ND QUARTILE	0.570	0.260	0.190	0.045	0.025	0.045	0.420
3RD QUARTILE	0.925	0.485	0.310	0.090	0.055	0.100	0.692
VOL. WGT. MEAN	0.532	0.274	0.171	0.051	0.037	0.058	0.430

NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
***** : INSUFFICIENT DATA OR NOT APPLICABLE

PART V

SUMMARY STATISTICS OF WET DEPOSITION BY STATION

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

PERIOD OF REPORT : JAN 1, 84 TO JAN 1,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	145	75	131	130	119	119	91
MAXIMUM	49.0	3.4689	2.7555	3.9004	166.60	18.620	16.065
MINIMUM	0.1	0.0022	0.0000	0.0021	0.06	0.000	0.000
RANGE	48.9	3.4668	2.7555	3.8983	166.54	18.620	16.065
ARITH. MEAN	6.2	0.7115	0.3662	0.5269	19.93	3.541	2.272
ARITH. STD. DEV	7.7	0.7440	0.5277	0.6688	26.33	3.667	3.020
GEOM. MEAN	2.8	0.3944	0.0875	0.2300	8.72	1.878	1.233
GEOM. STD. DEV.	4.2	3.8044	12.1127	4.5345	4.34	3.947	3.048
1ST QUARTILE	1.1	0.2166	0.0392	0.0984	3.51	0.973	0.523
2ND QUARTILE	3.3	0.4978	0.1630	0.2842	10.29	2.411	1.103
3RD QUARTILE	8.0	0.8521	0.4194	0.6605	23.66	4.230	2.712
VOL. WGT. MEAN	*******	0.4342	0.3363	0.4802	16.73	2.973	1.566

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	119	91	91	91	106
MAXIMUM	9.898	3.060	6.216	5.555	20.335
MINIMUM	0.000	0.000	0.000	0.000	0.000
RANGE	9.898	3.060	6.216	5.555	20.335
ARITH. MEAN	1.270	0.319	0.284	0.582	2.592
ARITH. STD. DEV	1.497	0.473	0.713	0.860	3.487
GEOM. MEAN	0.694	0.173	0.175	0.348	1.088
GEOM. STD. DEV.	3.389	3.578	3.902	3.689	4.831
1ST QUARTILE	0.324	0.045	0.017	0.117	0.386
2ND QUARTILE	0.772	0.125	0.085	0.276	1.226
3RD QUARTILE	1.562	0.401	0.282	0.699	3.545
VOL. WGT. MEAN	1.067	0.220	0.196	0.401	2.006

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

PERIOD OF REPORT : JAN 1, 84 TO JAN 1,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	108	24	96	96	93	92	80
MAXIMUM	42.4	2.4725	2.4725	2.7072	110.45	15.088	14.140
MINIMUM	0.0	0.1197	0.0030	0.0355	0.60	0.162	0.058
RANGE	42.4	2.3527	2.4695	2.6717	109.85	14.926	14.082
ARITH. MEAN	7.7	0.7386	0.4302	0.6277	19.91	3.759	1.548
ARITH. STD. DEV	8.3	0.6848	0.4976	0.5927	23.01	3.293	2.448
GEOM. MEAN	4.1	0.4938	0.2353	0.4170	11.03	2.505	0.795
GEOM. STD. DEV.	3.6	2.5486	3.3660	2.5843	3.18	2.694	2.963
1ST QUARTILE	1.8	0.2148	0.1051	0.2351	6.23	1.537	0.396
2ND QUARTILE	5.0	0.5104	0.2300	0.4036	11.19	2.942	0.653
3RD QUARTILE	10.6	0.9239	0.5582	0.9127	22.90	4.444	1.515
VOL. WGT. MEAN	*******	0.4004	0.3849	0.5616	18.17	3.440	1.251

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	92	79	80	80	90
MAXIMUM	15.645	2.310	4.320	9.312	19.680
MINIMUM	0.000	0.000	0.000	0.000	0.006
RANGE	15.645	2.310	4.320	9.312	19.673
ARITH. MEAN	1.150	0.262	0.209	0.510	2.576
ARITH. STD. DEV	1.784	0.411	0.512	1.172	3.541
GEOM. MEAN	0.708	0.163	0.161	0.255	1.250
GEOM. STD. DEV.	2.643	3.071	3.249	3.701	3.836
1ST QUARTILE	0.352	0.056	0.022	0.052	0.648
2ND QUARTILE	0.710	0.099	0.068	0.186	1.326
3RD QUARTILE	1.360	0.262	0.210	0.516	3.244
VOL. WGT. MEAN	1.047	0.213	0.169	0.412	2.227

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #08

PERIOD OF REPORT : DEC 30, 83 TO JAN 1,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	194	78	147	149	130	130	103
MAXIMUM	50.6	5.0879	2.2210	111.9300	154.33	21.252	10.140
MINIMUM	0.0	0.0940	0.0001	0.0102	0.20	0.042	0.000
RANGE	50.6	4.9939	2.2209	111.9198	154.13	21.210	10.140
ARITH. MEAN	5.3	0.7384	0.3346	1.2658	17.03	3.214	1.315
ARITH. STD. DEV	7.7	0.7357	0.3767	9.1461	20.54	3.392	1.696
GEOM. MEAN	1.9	0.5149	0.1558	0.2930	9.11	1.791	0.786
GEOM. STD. DEV.	5.2	2.3816	4.8236	3.6748	3.37	3.502	2.995
1ST QUARTILE	0.6	0.2672	0.0659	0.1317	3.99	0.910	0.311
2ND QUARTILE	2.3	0.6111	0.2004	0.2942	8.86	1.980	0.713
3RD QUARTILE	6.7	0.9067	0.4856	0.6822	23.55	4.265	1.757
VOL. WGT. MEAN	*******	0.3517	0.2648	1.0088	12.00	2.264	0.769

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	130	104	104	104	119
MAXIMUM	10.283	2.925	2.324	5.915	33.902
MINIMUM	0.000	0.000	0.000	0.000	0.000
RANGE	10.283	2.925	2.324	5.915	33.902
ARITH. MEAN	1.140	0.255	0.255	0.422	2.211
ARITH. STD. DEV	1.311	0.396	0.390	0.744	3.604
GEOM. MEAN	0.732	0.212	0.194	0.288	1.109
GEOM. STD. DEV.	2.707	2.814	3.161	3.271	3.618
1ST QUARTILE	0.358	0.055	0.041	0.048	0.470
2ND QUARTILE	0.870	0.130	0.106	0.244	1.237
3RD QUARTILE	1.535	0.287	0.363	0.477	2.896
VOL. WGT. MEAN	0.803	0.149	0.150	0.247	1.450

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM #16

PERIOD OF REPORT : JAN 5, 84 TO DEC 30,84

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	65	0	53	55	54	54	52
MAXIMUM	38.3	********	0.8516	1.5341	53.58	6.768	29.400
MINIMUM	0.1	********	0.0001	0.0015	0.54	0.049	0.000
RANGE	38.2	********	0.8516	1.5325	53.04	6.719	29.400
ARITH. MEAN	9.2	********	0.1278	0.2955	12.64	2.300	2.687
ARITH. STD. DEV	8.5	********	0.1966	0.3193	12.63	1.896	4.442
GEOM. MEAN	6.0	********	0.0299	0.1728	7.38	1.302	1.601
GEOM. STD. DEV.	2.8	********	10.3126	3.2773	3.20	3.880	2.574
1ST QUARTILE	3.4	********	0.0102	0.0819	3.39	0.801	0.896
2ND QUARTILE	6.3	********	0.0412	0.1670	9.51	1.920	1.573
3RD QUARTILE	10.9	********	0.1470	0.3381	15.45	3.451	2.539
VOL. WGT. MEAN	*******	********	0.1166	0.2948	11.33	2.063	2.337

	CHLORIDE MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	54	52	52	52	53
MAXIMUM	3.666	1.625	2.360	1.920	11.426
MINIMUM	0.168	0.000	0.000	0.000	0.000
RANGE	3.498	1.625	2.360	1.920	11.426
ARITH. MEAN	0.986	0.334	0.304	0.354	2.750
ARITH. STD. DEV	0.776	0.386	0.438	0.358	2.622
GEOM. MEAN	0.761	0.245	0.236	0.269	1.640
GEOM. STD. DEV.	2.076	2.520	3.058	2.449	3.352
1ST QUARTILE	0.440	0.093	0.052	0.139	0.715
2ND QUARTILE	0.767	0.199	0.156	0.263	1.865
3RD QUARTILE	1.281	0.381	0.380	0.428	4.252
VOL. WGT. MEAN	0.885	0.290	0.264	0.308	2.426

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13

PERIOD OF REPORT : JAN 2, 84 TO DEC 28,84

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	126	0	88	91	87	87	75
MAXIMUM	52.0	********	1.6514	2.4536	113.40	15.390	39.960
MINIMUM	0.0	********	0.0003	0.0118	0.10	0.000	0.000
RANGE	52.0	********	1.6511	2.4419	113.30	15.390	39.960
ARITH. MEAN	5.5	********	0.1114	0.2409	10.42	1.591	2.060
ARITH. STD. DEV	7.8	********	0.2273	0.3462	19.19	2.525	5.554
GEOM. MEAN	2.4	********	0.0299	0.1228	3.77	0.780	0.902
GEOM. STD. DEV.	4.1	********	6.2031	3.2432	4.30	3.843	3.351
1ST QUARTILE	0.8	********	0.0083	0.0507	1.42	0.199	0.379
2ND QUARTILE	2.6	********	0.0355	0.1070	3.12	0.686	0.682
3RD QUARTILE	6.4	********	0.1274	0.3167	10.31	1.678	1.400
VOL. WGT. MEAN	*******	********	0.0831	0.1978	7.47	1.141	1.298

	CHLORIDE MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	86	75	75	75	80
MAXIMUM	50.840	3.780	4.160	31.620	21.870
MINIMUM	0.000	0.000	0.000	0.000	0.000
RANGE	50.840	3.780	4.160	31.620	21.870
ARITH. MEAN	1.243	0.245	0.279	0.751	2.044
ARITH. STD. DEV	5.516	0.513	0.707	3.696	3.695
GEOM. MEAN	0.336	0.178	0.140	0.203	0.738
GEOM. STD. DEV.	3.840	2.815	4.240	4.340	5.448
1ST QUARTILE	0.126	0.048	0.012	0.023	0.065
2ND QUARTILE	0.310	0.086	0.066	0.120	0.624
3RD QUARTILE	0.678	0.194	0.196	0.315	2.466
VOL. WGT. MEAN	0.882	0.154	0.176	0.473	1.359

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12

PERIOD OF REPORT : JAN 1, 84 TO JAN 1,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	117	23	78	78	73	73	64
MAXIMUM	39.2	1.6189	2.2315	2.8859	284.40	33.640	104.400
MINIMUM	0.0	0.0074	0.0003	0.0240	0.84	0.108	0.030
RANGE	39.2	1.6116	2.2312	2.8619	283.56	33.532	104.370
ARITH. MEAN	6.6	0.4690	0.4485	0.7110	31.08	5.121	3.837
ARITH. STD. DEV	7.7	0.4446	0.4977	0.6805	43.14	6.653	13.184
GEOM. MEAN	3.3	0.2566	0.1796	0.4210	17.05	2.898	1.323
GEOM. STD. DEV.	3.6	3.9274	6.6854	3.2694	3.11	3.094	3.519
1ST QUARTILE	1.4	0.0685	0.0862	0.2233	9.93	1.542	0.730
2ND QUARTILE	3.8	0.3692	0.3369	0.5512	16.83	3.091	1.386
3RD QUARTILE	9.0	0.5925	0.5517	0.9038	28.41	5.370	2.541
VOL. WGT. MEAN	*******	0.3089	0.3507	0.5560	22.95	3.783	2.525

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	74	64	64	64	71
MAXIMUM	243.000	8.100	12.960	232.200	47.040
MINIMUM	0.000	0.000	0.000	0.000	0.000
RANGE	243.000	8.100	12.960	232.200	47.040
ARITH. MEAN	4.755	0.570	0.590	4.410	3.628
ARITH. STD. DEV	28.165	1.182	1.810	29.003	7.022
GEOM. MEAN	1.003	0.295	0.243	0.334	1.777
GEOM. STD. DEV.	3.269	3.031	3.525	4.960	3.383
1ST QUARTILE	0.505	0.112	0.061	0.109	0.879
2ND QUARTILE	0.980	0.203	0.177	0.373	1.819
3RD QUARTILE	1.540	0.549	0.340	0.608	3.250
VOL. WGT. MEAN	3.556	0.375	0.388	2.902	2.614

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/DAILY/AEROCHEM #15

PERIOD OF REPORT : JAN 16, 84 TO MAR 15,84

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES :	8	0	7	7	7	7	5
MAXIMUM :	18.8	********	0.3928	0.8159	21.62	5.452	2.820
MINIMUM :	0.8	********	0.0055	0.0208	0.36	0.152	0.128
RANGE :	18.0	********	0.3873	0.7951	21.26	5.300	2.692
ARITH. MEAN :	5.3	********	0.1191	0.2476	6.50	2.120	1.101
ARITH. STD. DEV :	5.9	********	0.1359	0.2719	7.12	1.756	1.048
GEOM. MEAN :	3.4	********	0.0623	0.1490	3.76	1.420	0.702
GEOM. STD. DEV. :	2.8	********	3.9949	3.1827	3.57	3.122	3.218
1ST QUARTILE :	1.5	********	0.0163	0.0545	1.27	0.593	0.274
2ND QUARTILE :	3.6	********	0.0641	0.1199	3.54	1.408	0.686
3RD QUARTILE :	6.5	********	0.1401	0.2842	7.14	2.692	1.068
VOL. WGT. MEAN :	********	********	0.1077	0.2240	5.88	1.918	0.864

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES :	7	5	5	5	7
MAXIMUM :	1.128	0.222	0.376	1.034	2.670
MINIMUM :	0.064	0.012	0.004	0.068	0.004
RANGE :	1.064	0.210	0.372	0.966	2.665
ARITH. MEAN :	0.490	0.099	0.120	0.395	0.671
ARITH. STD. DEV :	0.388	0.099	0.158	0.396	1.076
GEOM. MEAN :	0.345	0.053	0.043	0.238	0.110
GEOM. STD. DEV. :	2.713	3.918	6.196	3.364	10.404
1ST QUARTILE :	0.107	0.013	0.011	0.068	0.010
2ND QUARTILE :	0.348	0.036	0.025	0.216	0.069
3RD QUARTILE :	0.696	0.122	0.100	0.404	0.935
VOL. WGT. MEAN :	0.443	0.077	0.094	0.310	0.607

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM 802

PERIOD OF REPORT : JAN 5, 84 TO JAN 1,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES :	116	40	96	96	91	91	76
MAXIMUM :	51.0	19.8413	4.7596	6.4362	257.55	26.505	13.824
MINIMUM :	0.0	0.0613	0.0000	0.0051	0.66	0.000	0.216
RANGE :	51.0	19.7800	4.7596	6.4311	256.89	26.505	13.608
ARITH. MEAN :	8.5	1.6291	0.5862	0.8545	35.50	5.442	3.232
ARITH. STD. DEV :	10.0	3.2167	0.7523	1.0038	39.63	5.053	3.327
GEOM. MEAN :	4.4	0.8138	0.2177	0.4542	20.84	3.689	2.101
GEOM. STD. DEV. :	3.4	3.0688	8.6690	3.6568	3.13	2.537	2.540
1ST QUARTILE :	1.8	0.4243	0.1443	0.2275	11.08	2.008	0.979
2ND QUARTILE :	4.6	0.8577	0.3559	0.5740	22.37	3.930	2.045
3RD QUARTILE :	9.9	1.5655	0.6829	1.0552	45.70	7.282	3.882
VOL. WGT. MEAN :	*******	0.9445	0.5501	0.7688	30.46	4.669	2.385

	CHLORIDE MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES :	92	76	76	76	84
MAXIMUM :	10.830	2.844	3.515	5.130	21.228
MINIMUM :	0.152	0.000	0.000	0.000	0.000
RANGE :	10.678	2.844	3.515	5.130	21.228
ARITH. MEAN :	1.796	0.599	0.422	0.711	4.222
ARITH. STD. DEV :	1.839	0.615	0.615	1.052	4.364
GEOM. MEAN :	1.192	0.387	0.256	0.346	2.575
GEOM. STD. DEV. :	2.519	2.708	3.110	3.910	2.959
1ST QUARTILE :	0.658	0.191	0.088	0.133	1.157
2ND QUARTILE :	1.161	0.343	0.184	0.305	2.510
3RD QUARTILE :	2.184	0.818	0.472	0.739	5.783
VOL. WGT. MEAN :	1.556	0.442	0.312	0.525	3.404

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01

PERIOD OF REPORT : JAN 4, 84 TO DEC 30,84

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH6.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	107	43	104	104	98	98	81
MAXIMUM	139.5	33.4547	22.6182	24.7127	1018.08	110.175	30.682
MINIMUM	0.3	0.0005	0.0000	0.0192	1.47	0.060	0.062
RANGE	139.2	33.4542	22.6181	24.6935	1016.61	110.115	30.619
ARITH. MEAN	9.5	1.6667	0.7136	0.9525	39.59	5.924	3.567
ARITH. STD. DEV	15.3	5.0234	2.2442	2.4763	105.01	11.506	4.400
GEOM. MEAN	5.4	0.5559	0.1827	0.4169	17.61	3.246	1.996
GEOM. STD. DEV.	2.8	5.6112	9.8481	3.5119	3.30	3.040	3.157
1ST QUARTILE	2.5	0.2862	0.1128	0.1908	6.12	1.726	0.873
2ND QUARTILE	4.6	0.6748	0.3099	0.4328	18.44	3.991	2.039
3RD QUARTILE	11.3	1.2668	0.7648	1.2140	44.03	7.027	4.465
VOL. WGT. MEAN	*******	1.0521	0.7040	0.9397	37.38	5.593	2.887

	CHLORIDE MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	99	81	81	81	94
MAXIMUM	32.076	4.881	11.157	5.578	96.926
MINIMUM	0.000	0.000	0.000	0.000	0.058
RANGE	32.076	4.881	11.157	5.578	96.869
ARITH. MEAN	1.823	0.609	0.493	0.731	4.610
ARITH. STD. DEV	3.379	0.733	1.330	1.115	10.427
GEOM. MEAN	1.068	0.372	0.249	0.336	2.053
GEOM. STD. DEV.	2.693	3.104	3.656	3.894	3.695
1ST QUARTILE	0.542	0.124	0.056	0.120	0.943
2ND QUARTILE	1.079	0.372	0.213	0.291	2.639
3RD QUARTILE	2.040	0.811	0.479	0.717	5.178
VOL. WGT. MEAN	1.737	0.493	0.399	0.591	4.229

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM 807

PERIOD OF REPORT : JAN 1, 84 TO JAN 1,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	168	77	129	130	115	115	101
MAXIMUM	51.0	3.9551	2.2410	14.0000	135.80	35.040	9.700
MINIMUM	0.0	0.0079	0.0000	0.0035	0.95	0.051	0.000
RANGE	51.0	3.9472	2.2410	13.9965	134.85	34.989	9.700
ARITH. MEAN	6.3	0.7411	0.3685	0.6614	20.04	3.900	1.580
ARITH. STD. DEV	8.5	0.6852	0.4528	1.3297	22.85	4.624	1.729
GEOM. MEAN	3.1	0.4690	0.1224	0.3018	10.97	2.183	1.014
GEOM. STD. DEV.	3.4	3.0214	8.3677	3.7746	3.17	3.318	2.727
1ST QUARTILE	0.7	0.2301	0.0670	0.1337	3.95	1.075	0.562
2ND QUARTILE	3.1	0.6414	0.1711	0.3211	10.36	2.463	1.001
3RD QUARTILE	8.2	0.9667	0.5710	0.8080	30.22	4.992	1.961
VOL. WGT. MEAN	*******	0.3901	0.2896	0.5229	14.27	2.778	1.007

	CHLORIDE MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	116	101	101	100	106
MAXIMUM	8.322	2.328	2.040	6.327	25.220
MINIMUM	0.094	0.000	0.000	0.000	0.000
RANGE	8.228	2.328	2.040	6.327	25.220
ARITH. MEAN	1.416	0.273	0.427	0.717	2.893
ARITH. STD. DEV	1.353	0.335	0.453	1.005	3.905
GEOM. MEAN	0.968	0.194	0.302	0.403	1.503
GEOM. STD. DEV.	2.499	2.790	2.466	3.054	3.462
1ST QUARTILE	0.534	0.079	0.151	0.209	0.637
2ND QUARTILE	1.104	0.160	0.262	0.367	1.634
3RD QUARTILE	1.696	0.330	0.512	0.770	3.867
VOL. WGT. MEAN	1.017	0.174	0.272	0.456	1.934

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

PERIOD OF REPORT : JAN 8, 84 TO JAN 1,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	140	38	105	107	95	95	77
MAXIMUM	49.0	3.0917	2.6928	3.8122	150.12	20.580	15.211
MINIMUM	0.0	0.0033	0.0001	0.0076	0.00	0.000	0.000
RANGE	49.0	3.0884	2.6927	3.8046	150.12	20.580	15.211
ARITH. MEAN	6.9	0.7933	0.4308	0.6523	28.81	4.775	3.568
ARITH. STD. DEV	8.8	0.7331	0.5391	0.7349	29.03	3.969	3.044
GEOM. MEAN	3.2	0.3552	0.1143	0.3227	17.10	3.261	2.458
GEOM. STD. DEV.	3.9	6.0377	11.4170	3.8775	3.06	2.620	2.511
1ST QUARTILE	1.2	0.1651	0.0533	0.1215	8.87	1.932	1.347
2ND QUARTILE	3.3	0.6725	0.2211	0.3800	20.26	3.567	2.298
3RD QUARTILE	9.0	0.9807	0.6128	0.8598	36.81	6.453	5.309
VOL. WGT. MEAN	********	0.3798	0.3463	0.5322	21.45	3.555	2.283

	CHLORIDE MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	95	78	78	78	98
MAXIMUM	6.972	3.587	19.800	5.760	55.808
MINIMUM	0.116	0.000	0.000	0.000	0.122
RANGE	6.856	3.587	19.800	5.760	55.678
ARITH. MEAN	1.662	0.715	0.609	0.779	4.719
ARITH. STD. DEV	1.378	0.738	2.229	1.091	6.642
GEOM. MEAN	1.205	0.477	0.316	0.456	2.867
GEOM. STD. DEV.	2.384	2.778	2.881	3.147	2.787
1ST QUARTILE	0.787	0.195	0.107	0.140	1.854
2ND QUARTILE	1.311	0.502	0.294	0.493	2.736
3RD QUARTILE	1.935	0.887	0.487	0.866	5.819
VOL. WGT. MEAN	1.237	0.458	0.391	0.499	3.401

****** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : OTTER ISLAND/DAILY/AEROCHEM #17

PERIOD OF REPORT : JUN 23, 84 TO NOV 16,84

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES :	51	0	47	47	45	46	36
MAXIMUM :	51.0	********	1.0639	1.5709	43.32	15.618	6.890
MINIMUM :	0.1	********	0.0000	0.0023	0.19	0.000	0.000
RANGE :	50.9	********	1.0639	1.5686	43.13	15.618	6.890
ARITH. MEAN :	7.5	********	0.1854	0.3552	12.90	2.249	1.303
ARITH. STD. DEV :	9.7	********	0.2253	0.3818	12.14	3.052	1.667
GEOM. MEAN :	3.4	********	0.0605	0.1734	6.46	1.012	0.582
GEOM. STD. DEV. :	4.1	********	8.1219	4.1659	4.19	4.366	4.633
1ST QUARTILE :	1.2	********	0.0218	0.0629	2.44	0.271	0.226
2ND QUARTILE :	4.1	********	0.0893	0.2076	6.70	1.402	0.515
3RD QUARTILE :	9.8	********	0.2611	0.5260	21.82	3.030	2.152
VOL. WGT. MEAN :	********	********	0.1816	0.3479	12.14	2.158	1.005

	CHLORIDE MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES :	46	36	36	36	43
MAXIMUM :	4.590	0.689	1.001	0.910	10.070
MINIMUM :	0.016	0.000	0.000	0.000	0.000
RANGE :	4.574	0.689	1.001	0.910	10.070
ARITH. MEAN :	0.641	0.168	0.272	0.201	2.313
ARITH. STD. DEV :	0.858	0.196	0.307	0.255	2.558
GEOM. MEAN :	0.310	0.268	0.371	0.237	1.038
GEOM. STD. DEV. :	3.622	2.960	2.463	2.788	5.906
1ST QUARTILE :	0.098	0.000	0.000	0.018	0.292
2ND QUARTILE :	0.321	0.111	0.142	0.128	1.363
3RD QUARTILE :	0.856	0.325	0.472	0.219	2.940
VOL. WGT. MEAN :	0.615	0.129	0.210	0.155	2.088

******** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM 810

PERIOD OF REPORT : JAN 5, 84 TO JAN 1,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	61	20	55	54	54	54	49
MAXIMUM	48.4	3.0718	3.9341	5.0917	188.76	32.107	23.956
MINIMUM	1.2	0.0136	0.0004	0.0633	0.96	0.864	0.000
RANGE	47.2	3.0582	3.9337	5.0284	187.80	31.243	23.956
ARITH. MEAN	13.5	0.7359	0.6325	0.9862	32.21	5.459	3.105
ARITH. STD. DEV	11.6	0.8799	0.7847	1.0367	37.04	5.630	4.078
GEOM. MEAN	8.7	0.3583	0.3059	0.6269	19.68	3.873	1.817
GEOM. STD. DEV.	2.8	3.9099	4.8819	2.6947	2.81	2.228	2.835
1ST QUARTILE	4.4	0.1183	0.1833	0.2911	8.65	1.980	0.842
2ND QUARTILE	8.4	0.4215	0.3308	0.6870	23.12	3.974	1.730
3RD QUARTILE	20.7	0.7876	0.6936	1.1855	34.29	5.761	4.259
VOL. WGT. MEAN	*******	0.6325	0.6213	0.9608	31.18	5.285	2.803

	CHLORIDE MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	54	49	49	49	54
MAXIMUM	9.996	1.416	1.456	6.468	17.377
MINIMUM	0.000	0.000	0.000	0.000	0.073
RANGE	9.996	1.416	1.456	6.468	17.304
ARITH. MEAN	1.867	0.337	0.267	0.699	3.561
ARITH. STD. DEV	2.029	0.363	0.382	1.083	4.017
GEOM. MEAN	1.200	0.313	0.241	0.404	1.942
GEOM. STD. DEV.	2.685	2.462	3.912	3.925	3.495
1ST QUARTILE	0.509	0.081	0.002	0.042	0.891
2ND QUARTILE	1.070	0.176	0.075	0.227	2.444
3RD QUARTILE	2.325	0.430	0.345	1.004	4.206
VOL. WGT. MEAN	1.827	0.304	0.241	0.631	3.448

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM 805

PERIOD OF REPORT : JAN 1, 84 TO JAN 1,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES :	152	73	134	134	120	120	103
MAXIMUM :	40.0	5.2730	4.4881	5.0240	162.00	25.600	16.016
MINIMUM :	0.1	0.0082	0.0000	0.0089	0.26	0.000	0.013
RANGE :	39.9	5.2648	4.4881	5.0151	161.74	25.600	16.003
ARITH. MEAN :	6.2	0.8330	0.4029	0.5581	20.90	3.705	1.724
ARITH. STD. DEV :	7.8	0.8846	0.6299	0.7555	29.21	4.235	2.369
GEOM. MEAN :	2.9	0.4954	0.1190	0.2443	9.21	1.920	0.928
GEOM. STD. DEV. :	3.8	3.1100	7.5829	4.1229	3.85	3.701	3.198
1ST QUARTILE :	1.0	0.2360	0.0454	0.1001	3.00	0.904	0.438
2ND QUARTILE :	2.8	0.5779	0.1372	0.2877	9.35	2.148	0.882
3RD QUARTILE :	8.2	1.1171	0.4748	0.7038	26.09	4.814	1.962
VOL. WGT. MEAN :	*******	0.4689	0.3674	0.5090	17.26	3.059	1.265

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES :	121	103	103	103	114
MAXIMUM :	4.650	2.813	1.481	2.299	18.624
MINIMUM :	0.074	0.000	0.000	0.000	0.000
RANGE :	4.576	2.813	1.481	2.299	18.624
ARITH. MEAN :	1.164	0.243	0.242	0.413	2.426
ARITH. STD. DEV :	1.054	0.383	0.316	0.444	3.363
GEOM. MEAN :	0.765	0.155	0.184	0.235	0.985
GEOM. STD. DEV. :	2.630	3.172	3.227	3.280	5.189
1ST QUARTILE :	0.370	0.051	0.041	0.091	0.388
2ND QUARTILE :	0.766	0.102	0.113	0.239	1.216
3RD QUARTILE :	1.724	0.266	0.311	0.574	3.026
VOL. WGT. MEAN :	0.969	0.179	0.177	0.303	1.917

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

PERIOD OF REPORT : JAN 4, 84 TO DEC 29,84

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES :	108	0	73	77	73	73	66
MAXIMUM :	37.4	********	0.4701	1.0826	34.96	6.440	9.348
MINIMUM :	0.0	********	0.0005	0.0019	0.08	0.000	0.000
RANGE :	37.4	********	0.4697	1.0807	34.88	6.440	9.348
ARITH. MEAN :	6.5	********	0.0849	0.2386	7.65	1.492	1.648
ARITH. STD. DEV :	7.7	********	0.1094	0.2450	8.53	1.493	2.156
GEOM. MEAN :	3.2	********	0.0336	0.1366	4.03	0.832	0.809
GEOM. STD. DEV. :	3.8	********	4.9815	3.3112	3.50	3.810	3.726
1ST QUARTILE :	1.2	********	0.0119	0.0644	1.70	0.340	0.209
2ND QUARTILE :	3.2	********	0.0360	0.1506	4.19	0.980	0.828
3RD QUARTILE :	9.9	********	0.0926	0.2818	9.87	2.116	2.138
VOL. WGT. MEAN :	*******	********	0.0666	0.1940	5.99	1.169	1.155

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES :	72	66	65	65	70
MAXIMUM :	2.244	0.972	1.960	1.815	9.911
MINIMUM :	0.000	0.000	0.000	0.000	0.000
RANGE :	2.244	0.972	1.960	1.815	9.911
ARITH. MEAN :	0.412	0.208	0.182	0.246	1.720
ARITH. STD. DEV :	0.431	0.263	0.291	0.382	2.206
GEOM. MEAN :	0.263	0.207	0.155	0.183	0.808
GEOM. STD. DEV. :	2.963	3.175	3.387	3.149	4.510
1ST QUARTILE :	0.114	0.017	0.024	0.037	0.172
2ND QUARTILE :	0.246	0.104	0.065	0.080	0.738
3RD QUARTILE :	0.614	0.315	0.238	0.278	2.484
VOL. WGT. MEAN :	0.319	0.146	0.129	0.174	1.298

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM 804

PERIOD OF REPORT : JAN 1, 84 TO JAN 1,85

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES :	131	38	111	111	99	99	81
MAXIMUM :	35.8	3.4401	3.1907	4.1456	180.79	18.326	7.378
MINIMUM :	0.1	0.0074	0.0000	0.0196	0.64	0.240	0.000
RANGE :	35.7	3.4328	3.1906	4.1260	180.15	18.086	7.378
ARITH. MEAN :	7.3	0.8694	0.4296	0.6165	26.15	4.058	1.858
ARITH. STD. DEV :	7.6	0.8733	0.5512	0.6897	28.87	3.521	1.680
GEOM. MEAN :	4.4	0.4877	0.1548	0.3491	15.31	2.907	1.232
GEOM. STD. DEV. :	2.9	3.5494	8.2726	3.1701	3.09	2.347	2.712
1ST QUARTILE :	2.1	0.2448	0.0760	0.1444	6.89	1.645	0.662
2ND QUARTILE :	4.1	0.5343	0.2533	0.3855	18.48	3.005	1.245
3RD QUARTILE :	9.5	1.2241	0.5353	0.7798	31.28	4.837	2.728
VOL. WGT. MEAN :	*******	0.4674	0.3876	0.5591	21.45	3.329	1.334

	CHLORIDE MG/M**2	MAGNESIM MG/M**2	POTASSIM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES :	100	81	81	81	93
MAXIMUM :	5.094	1.806	1.556	2.328	19.869
MINIMUM :	0.030	0.000	0.000	0.000	0.000
RANGE :	5.064	1.806	1.556	2.328	19.869
ARITH. MEAN :	1.196	0.353	0.111	0.372	3.486
ARITH. STD. DEV :	1.018	0.357	0.194	0.513	3.336
GEOM. MEAN :	0.853	0.252	0.213	0.281	2.348
GEOM. STD. DEV. :	2.385	2.761	2.814	3.183	2.636
1ST QUARTILE :	0.531	0.087	0.000	0.046	1.367
2ND QUARTILE :	0.804	0.231	0.054	0.193	2.591
3RD QUARTILE :	1.651	0.514	0.148	0.398	4.412
VOL. WGT. MEAN :	0.990	0.253	0.079	0.267	2.706

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09

PERIOD OF REPORT : JAN 1, 84 TO OCT 29,84

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES :	53	20	38	38	35	34	32
MAXIMUM :	26.0	1.4631	********	3.0420	132.60	12.740	7.590
MINIMUM :	0.9	0.0633	0.0001	0.0266	0.74	0.098	0.204
RANGE :	25.1	1.3998	********	3.0154	131.86	12.642	7.386
ARITH. MEAN :	9.0	0.5467	122.3570	0.6937	27.43	3.851	2.208
ARITH. STD. DEV :	7.2	0.4403	751.4629	0.6204	27.34	2.996	1.869
GEOM. MEAN :	6.0	0.3832	0.2668	0.4467	16.92	2.582	1.525
GEOM. STD. DEV. :	2.7	2.5209	12.8568	2.9138	3.03	2.908	2.547
1ST QUARTILE :	2.9	0.1867	0.1429	0.2350	8.77	1.544	0.906
2ND QUARTILE :	7.0	0.3947	0.3165	0.5739	18.78	2.906	1.664
3RD QUARTILE :	14.7	0.7732	0.5784	0.9216	31.96	5.278	2.930
VOL. WGT. MEAN :	*******	0.4517	124.1970	0.7042	25.89	3.572	1.943

	CHLORIDE MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES :	34	32	32	32	34
MAXIMUM :	10.682	1.225	0.816	6.566	15.600
MINIMUM :	0.120	0.000	0.000	0.000	0.106
RANGE :	10.562	1.225	0.816	6.566	15.494
ARITH. MEAN :	1.491	0.350	0.307	0.648	3.209
ARITH. STD. DEV :	1.785	0.311	0.249	1.169	3.032
GEOM. MEAN :	1.019	0.259	0.244	0.398	2.133
GEOM. STD. DEV. :	2.423	2.538	2.860	3.245	2.787
1ST QUARTILE :	0.504	0.158	0.115	0.174	1.392
2ND QUARTILE :	1.215	0.232	0.216	0.381	2.298
3RD QUARTILE :	1.755	0.525	0.495	0.610	4.001
VOL. WGT. MEAN :	1.383	0.308	0.270	0.570	2.951

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

PART VI

SUMMARY STATISTICS OF WET DEPOSITION BY REGION

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CENTRAL REGION/DAILY PRECIPITATION

PERIOD OF REPORT : DEC 30, 83 TO DEC 31,84

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	655	302	539	541	482	482	397
MAXIMUM	336.0	19.7852	21.6940	111.9300	1041.60	144.480	218.240
MINIMUM	0.0	0.0022	0.0000	0.0021	0.06	0.000	0.000
RANGE	336.0	19.7830	21.6940	111.9278	1041.54	144.480	218.240
ARITH. MEAN	7.2	0.8679	0.4375	0.8675	24.45	4.430	2.403
ARITH. STD. DEV	18.4	1.4456	1.1489	5.0182	67.87	10.370	11.236
GEOM. MEAN	2.8	0.4932	0.1262	0.2805	9.94	2.031	1.021
GEOM. STD. DEV.	4.0	3.1116	7.9132	4.0692	3.80	3.720	3.149
1ST QUARTILE	1.0	0.2490	0.0534	0.1192	3.84	1.017	0.463
2ND QUARTILE	3.0	0.5804	0.1854	0.3082	10.13	2.381	0.935
3RD QUARTILE	8.0	1.0240	0.5002	0.7062	26.32	4.878	2.144
VOL. WGT. MEAN	*******	0.4694	0.3667	0.7285	18.58	3.367	1.569

	CHLORIDE MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	484	398	398	397	443
MAXIMUM	77.440	49.280	27.280	51.920	176.000
MINIMUM	0.000	0.000	0.000	0.000	0.000
RANGE	77.440	49.280	27.280	51.920	176.000
ARITH. MEAN	1.630	0.425	0.433	0.752	3.399
ARITH. STD. DEV	4.587	2.516	1.849	2.932	12.232
GEOM. MEAN	0.823	0.192	0.217	0.327	1.215
GEOM. STD. DEV.	2.965	3.228	3.434	3.550	4.274
1ST QUARTILE	0.400	0.061	0.049	0.111	0.466
2ND QUARTILE	0.880	0.138	0.149	0.287	1.380
3RD QUARTILE	1.688	0.315	0.382	0.672	3.371
VOL. WGT. MEAN	1.243	0.278	0.283	0.491	2.411

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTHWESTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : JUL 17, 54 TO DEC 31,84

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES :	358	0	268	277	266	267	234
MAXIMUM :	52.0	********	1.6514	2.4536	113.40	15.618	39.960
MINIMUM :	0.0	********	0.0000	0.0015	0.08	0.000	0.000
RANGE :	52.0	********	1.6514	2.4521	113.32	15.618	39.960
ARITH. MEAN :	6.8	********	0.1206	0.2707	10.42	1.834	1.946
ARITH. STD. DEV :	8.2	********	0.1946	0.3215	14.19	2.270	4.010
GEOM. MEAN :	3.2	********	0.0356	0.1443	4.82	0.935	0.924
GEOM. STD. DEV. :	3.9	********	6.8709	3.4199	3.89	3.936	3.587
1ST QUARTILE :	1.3	********	0.0122	0.0653	1.84	0.320	0.348
2ND QUARTILE :	3.6	********	0.0422	0.1526	5.20	1.076	0.895
3RD QUARTILE :	8.9	********	0.1470	0.3453	13.38	2.616	2.125
VOL. WGT. MEAN :	********	********	0.0997	0.2374	8.41	1.485	1.398

	CHLORIDE MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES :	265	234	233	233	253
MAXIMUM :	50.840	3.780	4.160	31.620	21.870
MINIMUM :	0.000	0.000	0.000	0.000	0.000
RANGE :	50.840	3.780	4.160	31.620	21.870
ARITH. MEAN :	0.841	0.239	0.253	0.429	2.110
ARITH. STD. DEV :	3.196	0.381	0.492	2.119	2.888
GEOM. MEAN :	0.366	0.207	0.184	0.216	0.899
GEOM. STD. DEV. :	3.356	2.924	3.646	3.329	5.179
1ST QUARTILE :	0.153	0.033	0.018	0.047	0.164
2ND QUARTILE :	0.387	0.130	0.097	0.135	0.920
3RD QUARTILE :	0.815	0.298	0.280	0.336	2.818
VOL. WGT. MEAN :	0.676	0.172	0.182	0.309	1.627

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHEASTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : JUL 17, 54 TO DEC 31,84

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES	337	87	265	264	254	252	224
MAXIMUM	48.4	3.0718	********	5.0917	284.40	33.640	104.400
MINIMUM	0.0	0.0074	0.0001	0.0240	0.60	0.098	0.000
RANGE	48.4	3.0644	********	5.0677	283.80	33.542	104.400
ARITH. MEAN	8.3	0.6226	17.9578	0.7256	26.18	4.430	2.577
ARITH. STD. DEV	8.7	0.6358	284.5605	0.7344	32.51	4.761	7.452
GEOM. MEAN	4.5	0.3640	0.2313	0.4539	14.83	2.853	1.194
GEOM. STD. DEV.	3.5	3.2259	5.7103	2.8622	3.10	2.737	3.131
1ST QUARTILE	2.0	0.1827	0.1318	0.2540	7.25	1.710	0.546
2ND QUARTILE	5.1	0.4196	0.2881	0.5135	15.53	3.257	1.210
3RD QUARTILE	11.4	0.7752	0.5816	0.9434	31.42	5.258	2.532
VOL. WGT. MEAN	********	0.4103	15.8368	0.6394	22.38	3.779	1.991

	CHLORIDE MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES	253	223	224	224	247
MAXIMUM	243.000	8.100	12.960	232.200	34.800
MINIMUM	0.000	0.000	0.000	0.000	0.000
RANGE	243.000	8.100	12.960	232.200	34.800
ARITH. MEAN	2.345	0.361	0.323	1.616	2.933
ARITH. STD. DEV	15.289	0.666	0.991	15.512	3.816
GEOM. MEAN	0.910	0.235	0.207	0.319	1.597
GEOM. STD. DEV.	2.808	2.895	3.398	3.958	3.443
1ST QUARTILE	0.471	0.072	0.029	0.079	0.771
2ND QUARTILE	0.906	0.171	0.119	0.277	1.857
3RD QUARTILE	1.636	0.457	0.336	0.616	3.606
VOL. WGT. MEAN	2.005	0.280	0.249	1.248	2.450

****** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH. DIVIDED BY THE NUMBER OF SAMPLES.

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF CALCULATED DEPOSITIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SOUTHWESTERN REGION/DAILY PRECIPITATION

PERIOD OF REPORT : JAN 1, 84 TO DEC 30,84

	PRECIP. MM	FREE H+ FIELD MG/M**2	FREE H+ LAB MG/M**2	TOTAL H+ TO PH8.3 MG/M**2	SULPHATE MG/M**2	NITRATE AS N MG/M**2	CALCIUM MG/M**2
# OF SAMPLES :	491	159	414	416	381	381	314
MAXIMUM :	139.5	33.4547	22.6182	24.7127	1018.08	110.175	30.682
MINIMUM :	0.0	0.0005	0.0000	0.0051	0.00	0.000	0.000
RANGE :	139.5	33.4542	22.6181	24.7076	1018.08	110.175	30.682
ARITH. MEAN :	7.8	1.2579	0.5383	0.7637	32.39	5.020	3.008
ARITH. STD. DEV :	10.5	3.1201	1.2466	1.4268	60.31	6.881	3.257
GEOM. MEAN :	4.1	0.5328	0.1621	0.3788	17.46	3.238	1.866
GEOM. STD. DEV. :	3.3	4.5886	9.5714	3.5615	3.15	2.637	2.800
1ST QUARTILE :	1.8	0.2917	0.0904	0.1704	7.91	1.784	0.940
2ND QUARTILE :	4.1	0.6904	0.2876	0.4333	20.20	3.546	1.854
3RD QUARTILE :	10.0	1.2814	0.6360	0.9262	38.67	6.401	4.198
VOL. WGT. MEAN :	*******	0.6831	0.4829	0.6815	26.90	4.169	2.147

	CHLORIDE MG/M**2	MAGNESIUM MG/M**2	POTASSIUM MG/M**2	SODIUM MG/M**2	AMMONIUM AS N MG/M**2
# OF SAMPLES :	384	315	315	315	359
MAXIMUM :	32.076	4.881	19.800	5.760	96.926
MINIMUM :	0.000	0.000	0.000	0.000	0.000
RANGE :	32.076	4.881	19.800	5.760	96.926
ARITH. MEAN :	1.600	0.558	0.404	0.637	4.241
ARITH. STD. DEV :	2.114	0.618	1.343	0.970	6.832
GEOM. MEAN :	1.058	0.358	0.254	0.346	2.420
GEOM. STD. DEV. :	2.499	2.888	3.165	3.549	3.029
1ST QUARTILE :	0.586	0.150	0.046	0.110	1.222
2ND QUARTILE :	1.103	0.355	0.156	0.277	2.632
3RD QUARTILE :	1.921	0.753	0.373	0.701	5.228
VOL. WGT. MEAN :	1.338	0.398	0.289	0.455	3.368

***** : INSUFFICIENT DATA
NOTE(1): PRECIP. VALUES REPRESENT GAUGE DEPTH
NOTE(2): THE VOLUME WEIGHTED MEAN DEPOSITION REPRESENTS THE PRODUCT OF VOLUME WEIGHTED MEAN CONCENTRATION (SEE PART III) AND ANNUAL PRECIPITATION GAUGE DEPTH, DIVIDED BY THE NUMBER OF SAMPLES.

PART VII

SUMMARY STATISTICS OF AIR CONCENTRATION BY STATION, REGION

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AIR #11

PERIOD OF REPORT : JAN 1,84 TO DEC 12,84

	SULPHUR DIOXIDE UG/MM**3	SULPHATE UG/MM**3	NITRIC AS N UG/MM**3	AMMONIUM AS N UG/MM**3	NITRATE AS N UG/MM**3	TOTL NO3 AS N UG/MM**3
# OF SAMPLES :	290.0	290.00	290.00	280.000	290.00	290.00
MAXIMUM :	69.3	24.69	2.18	5.676	3.19	3.84
MINIMUM :	0.0	0.00	0.00	0.000	0.00	0.00
RANGE :	69.3	24.69	2.18	5.676	3.19	3.84
ARITH. MEAN :	4.4	3.85	0.42	0.960	0.18	0.60
ARITH. STD. DEV :	7.2	4.24	0.40	1.003	0.33	0.57
GEOM. MEAN :	1.8	2.10	0.26	0.536	0.15	0.38
GEOM. STD. DEV. :	4.7	3.60	3.06	3.474	3.39	2.97
1ST QUARTILE :	0.7	0.92	0.12	0.257	0.02	0.18
2ND QUARTILE :	2.3	2.58	0.29	0.638	0.08	0.45
3RD QUARTILE :	5.6	5.10	0.59	1.244	0.20	0.86

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AIR 808

PERIOD OF REPORT : JAN 1,84 TO JAN 1,85

	SULPHUR DIOXIDE UG/M***3	SULPHATE UG/M***3	NITRIC AS N UG/M***3	AMMONIUM AS N UG/M***3	NITRATE AS N UG/M***3	TOTL NO3 AS N UG/M***3
# OF SAMPLES :	340.0	341.00	349.00	340.000	341.00	341.00
MAXIMUM :	62.9	25.59	2.96	4.543	1.23	2.96
MINIMUM :	0.0	0.00	0.00	0.001	0.00	0.00
RANGE :	62.9	25.59	2.96	4.542	1.23	2.96
ARITH. MEAN :	4.8	3.36	0.32	0.714	0.05	0.37
ARITH. STD. DEV :	7.9	3.56	0.41	0.786	0.14	0.48
GEOM. MEAN :	1.5	2.03	0.16	0.384	0.21	0.18
GEOM. STD. DEV. :	6.3	3.05	3.49	3.480	4.61	3.59
1ST QUARTILE :	0.5	1.06	0.06	0.175	0.00	0.06
2ND QUARTILE :	2.1	2.16	0.15	0.393	0.00	0.16
3RD QUARTILE :	5.7	4.29	0.43	0.938	0.04	0.51

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AIR #16

PERIOD OF REPORT : JAN 12,84 TO JAN 1,85

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	NITRIC AS N UG/M**3	AMMONIUM AS N UG/M**3	NITRATE AS N UG/M**3	TOTL NO3 AS N UG/M**3
# OF SAMPLES :	228.0	235.00	236.00	235.000	235.00	235.00
MAXIMUM :	14.9	20.27	1.93	4.481	3.00	3.92
MINIMUM :	0.0	0.00	0.00	0.000	0.00	0.00
RANGE :	14.9	20.27	1.93	4.481	3.00	3.92
ARITH. MEAN :	0.9	1.48	0.13	0.372	0.06	0.19
ARITH. STD. DEV :	1.6	1.96	0.25	0.570	0.23	0.38
GEOM. MEAN :	0.3	0.93	0.09	0.218	0.18	0.10
GEOM. STD. DEV. :	5.4	3.01	3.31	3.161	5.27	3.52
1ST QUARTILE :	0.1	0.39	0.03	0.082	0.00	0.03
2ND QUARTILE :	0.3	0.95	0.06	0.196	0.00	0.08
3RD QUARTILE :	0.9	1.72	0.15	0.385	0.03	0.19

ONTARIO MINISTRY OF THE ENVIRONMENT
SUMMARY STATISTICS OF AMBIENT CONCENTRATIONS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AIR 802

PERIOD OF REPORT : JAN 4,84 TO JAN 1,85

	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	NITRIC AS N UG/M**3	AMMONIUM AS N UG/M**3	NITRATE AS N UG/M**3	TOTL NO3 AS N UG/M**3
# OF SAMPLES :	333.0	343.00	342.00	341.000	343.00	342.00
MAXIMUM :	71.7	25.32	2.86	6.192	3.38	4.20
MINIMUM :	0.0	0.00	0.00	0.000	0.00	0.00
RANGE :	71.7	25.32	2.86	6.192	3.38	4.20
ARITH. MEAN :	8.4	4.98	0.53	1.438	0.45	0.98
ARITH. STD. DEV :	10.6	4.59	0.52	1.243	0.52	0.75
GEOM. MEAN :	4.3	3.23	0.33	0.961	0.25	0.69
GEOM. STD. DEV. :	3.6	2.86	3.22	2.712	3.79	2.65
1ST QUARTILE :	2.1	1.75	0.15	0.505	0.08	0.41
2ND QUARTILE :	5.4	3.63	0.36	1.036	0.31	0.82
3RD QUARTILE :	10.1	6.78	0.81	1.938	0.62	1.31